The Contribution of Economic Development Agencies to Economic Growth and Revitalization in Seven States

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The Contribution of Economic Development Agencies to Economic Growth and Revitalization in Seven States: Delaware, Maryland, North Carolina, Pennsylvania, South Carolina, Virginia, West Virginia

A Report to the Task Force on State Economic Development

by

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Much attention has recently been given to discussion of the way in which the Baltimore area should organize its economic development efforts. Various proponents have argued the merits of promoting the city alone, the metropolitan region, or the Washington-Baltimore bi-region. All these debaters agree, however, first, that a strong economic development program on the state level is essential if a local, metropolitan, or bi-metropolitan strategy is to succeed; and, second, that such a program does not exist in the State of Maryland.

This study was undertaken in April 1977 with the confidence that increased attention would be paid to the issue of state economic development and that much could be learned from Maryland's competitive neighboring states about structures and programs which it might profitably duplicate. Most recently, however, the discussion has escalated in intensity and scale, centering on the future of the Maryland economy, which several forecasters have painted in less than optimistic hues. This study has accordingly adopted a wider focus, and now includes a portrait of each state, in order to demonstrate the way in which the development programs fit the historic, social, political, and economic conditions for which they were designed.

The policymakers in several of the more southern states, because of their historical development, have been practicing economic development in close to its classic sense: that is, the development of the economies of underdeveloped areas of the world. In some states, they are most interested in maintaining present rates of economic growth. In still others, and the argument is made that Maryland is among them, they are engaged in attempts to revitalize declining

economies. Each situation should be of interest to Maryland policy-makers, since the Maryland state boundaries define a political unit only; the regions within it present a variety of economic structures which correspond to conditions in surrounding states.

This report was prepared as a working paper for the Task Force on State Economic Development of the Policy Committee and served as a reference work for the Task Force findings and recommendations, which are reported under separate cover.

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SUMMARY

I. In terms of employment change, Maryland is participating in, and in many industries exceeding, the decline of the northeastern quadrant of the United States.

A. No manufacturing industries experienced employment growth between 1970 and 1975 in the northeast.

B. Maryland employment decline exceeded that of the northeast region in total manufacturing employment and in 10 of the 17 manufacturing industry classifications between 1970 and 1975.

C. Of the remaining 7 industries, Maryland experienced actual employment growth in only one, petroleum and coal. In the other 6 industries, Maryland's employment decline was merely less than the relative decline in the region.

D. 1970-1975 declines represent an acceleration of negative trends apparent in the 1960-70 time period; Maryland lagged behind minimal regional growth or exceeded regional decline in 6 of the 17 manufacturing industry classifications between 1960 and 1970.

II. In terms of the critical variables for location decisions of business and industry, Maryland's long-term attractiveness is questionable, although it does have positive attributes.

A. Maryland has no industrially significant natural resources, with the possible exception of coal in the western counties which is not being fully exploited. In particular, it does

not enjoy the mildness of climate which is attracting people and jobs to the states south and west of it.

B. Markets

1. Maryland is appealing because of its consumer market characteristics. It has a dense population which has grown rapidly in the past and which enjoys relatively high incomes. However, population growth has slowed drastically in the past five years and in-migration has decreased. Personal income has continued to grow at above national average rates, as it has in the other six states in the study.

2. Maryland's intermediate market characteristics are less attractive. Manufacturing has declined significantly in the state in the past 15 years and currently employs a much smaller percentage of Marylanders than manufacturing nationally or in the other six states. The probability of attracting industry which either buys or sells from Maryland industry is therefore decreasing. The ability of the state to retain industry is also negatively affected.

3. Maryland locations offer transportation advantages in terms of cost (distance to markets) and service (availability of truck, rail, air). The Port of Baltimore is clearly a major asset.

C. Labor

1. Wages are relatively high in Maryland, a disincentive to industrial location.

2. Unionization is relatively high in Maryland and the state does not have a right to work law. Unionization affects wage rates and the perception by managers of the business climate in the state.

3. In 1974, Maryland was relatively low in number of days idle due to work stoppages, lower than several states which have right to work laws.

4. Maryland's population is relatively well-educated and the state spends an above-average amount of its funds on education. Vocational education receives less emphasis in Maryland than in some of the other states and enrolls more students in office occupations training than in trade and industry training.

D. Maryland has above-national average crime rates in every serious crime category except burglary. It has a national reputation for political corruption.

E. Maryland has relatively few local governments, which are highly autonomous. The power in state government rests in the executive branch.

III. Maryland's economic development agency, and thus the state's development effort, are ineffective. This can be primarily attributed to a lack of gubernatorial leadership.

A. Development agencies in the seven states vary considerably in their position in the state government structure. Effectiveness does not seem to be associated with one particular structure, which suggests that formal structure may not be

as important as informal structure, i.e., the priority given the function, regardless of its location, by the governor.

B. Maryland's DECD (Department of Economic and Community Development) Division of Economic Development has comparatively underdeveloped relationships with other state agencies, local development agencies and the private sector.

C. Maryland DECD Division of Economic Development contains an extraordinarily wide variety of functions.

D. Maryland DECD employees directly involved in business development are relatively few in number and not particularly well-paid.

E. Maryland is spending a comparatively small amount per capita for economic development. This is a measure of the low priority given the function by the governor. It also spends a relatively small total amount, which affects its ability to compete for business with the other 49 states.

F. National data suggest that Maryland has not taken full advantage of available federal aid.

G. The Maryland development agency has a fairly broad conception of economic development, which includes not only manufacturing activity, but also corporate headquarters, regional offices, and research and development facilities.

H. Maryland DECD has a strong research division which performs basic economic and some issue-related research but little applied research. The Business and Industrial Development section will establish its own applied research arm to do feasibility studies which examine Maryland's comparative attractiveness to various industries.

I. At least 50%, and probably about 75%, of new jobs are the result of expansion of existing businesses. Two staff members in Maryland DECD concentrate on existing business needs. MIDFA's (Maryland Industrial Development Financing Authority) loan guarantees to expanding businesses are the primary program for existing business.

J. Local governments tend to control development attitudes and the attraction and placement of industry in Maryland. The state agency has not been successful in designing a program which recognizes this reality. An attempt to devise a state-local development planning process was not supported by the previous governor. North Carolina attributes its success to the state-local network of industrial development professionals.

K. Maryland plans to undertake four new feasibility studies in order to target likely industrial prospects for the state. Limited funds preclude significant marketing and advertising activities. Only one newly-hired individual from Maryland travels around the country developing contacts with companies which may relocate. Virginia attributes its success to the stable group of industrial development representatives it has assigned to geographic areas of the United States and who have developed relationships with most major and medium sized companies. Banquet tours are regarded by the seven state agencies with varying degrees of enthusiasm, but may be considered by Maryland as part of an initial effort to overcome its negative image. Tourism advertising benefits the image of several of the states examined.

L. Maryland recently opened an office in Brussels to seek foreign investment for the state. Pennsylvania's use of federal government programs and South Carolina's use of foreign trade zones provide successful examples from which Maryland can benefit.

M. Maryland appears to offer incentives to industry similar to those in other states. Pennsylvania's PIDA (Pennsylvania Industrial Development Authority) seems to have several advantages over MIDFA, however, including attractiveness to banks and participation by local development commissions. Financial programs are examined in depth in a companion working paper by Susan M. Briscoe.

N. Effectiveness of development agencies is difficult to measure: development efforts take a long time to pay off and it is almost impossible to say what percentage of growth is attributable to the agencies' programs. Of the states studied, North Carolina is enjoying the most new activity, both from out-of-state relocations and expansion of existing firms. The development agency there credits itself with 30% of the new plant establishments. A shift-share analysis of employment growth in the seven states relative to the regions of which they are a part (Middle Atlantic or South Atlantic) shows that regional growth explains most of South Carolina's growth and a good deal of Virginia's. North Carolina exhibited the largest positive departures from South Atlantic regional trends and, by inference, the largest state competitive advantage. Whether this is the result

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INTRODUCTION

Why the concern about economic development? Several of Maryland's elected officials have assured us in response to the "Anastasi" report[1] that the state's economy is in fact in fine shape; a $128 million state budget surplus has been announced; the federal government has made no decision to abandon Washington, D.C. as the nation's capital. This paper presents evidence which strongly suggests first, that there is cause for alarm; second, that in terms of the factors important to industrial location decisions, Maryland has at best a mixed record and thus must work hard to sell itself; and third, that the agency charged with economic development in the state has been largely ineffective, not because it lacked the programs and mechanisms used by other states, but rather the result of neglect by the governor and the legislature, apathy on the part of the public, and a markedly uncoordinated approach by state and local governments.

Economic development is traditionally depicted in terms of jobs and taxes. The latter include both the taxes paid by businesses directly to the various levels of government and the taxes paid by their employees. Tax issues are addressed in companion Task Force working papers by David Greytak.[2]

Employment characteristics of each of the seven states in this study are fully described in section I.C and analyzed in greater detail in section V. As an introduction and framework for reading the report, however, an indication of Maryland's comparative employment status can be helpful.

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[1] The Maryland Economy: Status and Outlook, 1976-1977.

[2] Greytak, David, "Personal Taxes Compared Among Eight States," October, 1977. Greytak, David, "The Status and Prospects of Maryland's Public and Private Sectors," February, 1978.

The decline of the northeast quadrant of the United States as a population and employment center has been well documented. A summary of employment change between 1960 and 1970, and 1970 and 1975 is presented below for two-digit SIC industry classifications:

Table i Employment change in the Northeast United States, 1960-70, 1970-1975 (ME, NH, VT, MA, RI, CT, NY, NJ, PA, MD, DE, OH, IN, IL, MI, WI)

	E_{70}/E_{60}	E_{75}/E_{70}
Mining	.78	1.13
Construction	1.17	.88
All manufacturing	1.06	.88
Food and kindred products	.93	.87
Tobacco	.70	.62
Textile mill and apparel and other products	.85	.77
Lumber and wood products	.93	.89
Furniture fixtures	.99	.88
Paper and allied products	1.07	.85
Printing and publishing	1.14	.91
Chemicals and allied products	1.20	.93
Petroleum and coal	.87	1.00
Rubber and plastics NEC	1.30	.91
Leather products	.77	.68
Stone, clay and glass	.98	.91
Primary metals	1.03	.87
Fabricated metal products	1.13	.89
Machinery, except electrical	1.20	.95
Electrical equipment and supplies	1.13	.82
Transportation equipment	1.04	.94
Instruments	1.21	.96
Miscellaneous manufacturing	.97	.86
Transportation and Public Utilities	1.06	.95
Wholesale and Retail Trade	1.27	1.07
Finance, Insurance, Real Estate	1.29	1.07
Services	1.49	1.15
Government	1.48	1.22
TOTAL NON-AGRICULTURAL EMPLOYMENT	1.23	1.02

Source: U.S. Department of Labor, Bureau of Labor Statistics, Employment and Earnings, States and Areas, 1939-75, Washington, D.C., 1977; author's calculations.

As can readily be seen, the only industries which grew or maintained employment levels between 1970 and 1975 (ratios of 1.00 or greater) were directly energy related: mining and the petroleum and coal industry. The non-manufacturing sectors all grew between those years but by much smaller amounts than between 1960 and 1970, and total employment grew only slightly.

Maryland's participation in the northeastern decline was analyzed in the following manner: given Maryland's employment in an industry in a base year, what would its employment have been if it had grown or declined at the same rate as the region as a whole? This number is then subtracted from Maryland's actual employment at the end of a time period, yielding the number of (thousands of) jobs that Maryland gained or lost in excess of the number it would have gained or lost by simply following the regional trend. Positive numbers represent thousands of jobs gained in excess of the regional trend; negative numbers, thousands of jobs lost in excess of the regional trend.

Table ii Regional Shares of Maryland Employment Change, 1960-70, 1970-75, Northeastern U.S. (In thousands)

	1960-70*	1970-75**
Mining	0.42	-0.45
Construction	16.56	14.11
All manufacturing	4.39	-8.67
Food and kindred products	3.37	-2.56
Textile mill, apparel and other textile products	2.85	-0.72
Lumber and wood products	-0.95	0.21
Furniture and fixtures	0.15	-0.95
Paper and allied products	1.21	0.73
Printing and publishing	5.79	1.12
Chemicals and allied products	-2.16	-2.58
Petroleum and coal	-0.14	0.30
Rubber and plastics NEC	-0.60	-0.90
Leather products	0.50	-0.10
Stone, clay and glass	1.00	-0.11
Primary metals	-1.17	-6.20
Fabricated metal products	-	0.55
Machinery, exc. electrical	1.36	-0.63
Electrical equipment and supplies	.93	2.70
Transportation equipment	-2.34	-0.02
Transportation and Public Utilities	4.47	1.75
Wholesale and Retail Trade	61.81	30.02
Finance, Insurance, Real Estate	11.45	6.10
Services	53.13	13.20
Government	37.66	-1.88
TOTAL NON-AGRICULTURAL EMPLOYMENT	198.13	97.59

$$*E^{S}_{i\,70} - \left(E^{R}_{i\,70} \Big/ E^{R}_{i\,60}\right) E^{S}_{i\,60}$$

$$**E^{S}_{i\,75} - \left(E^{R}_{i\,75} \Big/ E^{R}_{i\,70}\right) E^{S}_{i\,70}$$

Source: Employment and Earnings, States and Areas, 1939-75; author's calculations

It is clear that Maryland is not only participating in the decline of the northeast, but also in many cases is actually outpacing it, particularly in the 1970-75 time period. For example, in all manufacturing industries, the northeast region's employment in 1975 was only 88% of what it had been in 1970. In Maryland, employment in manufacturing in 1975 was 8,670 jobs less than 88% of the manufacturing employment in 1970. Even in electrical equipment and supplies, in which Maryland appears to have done well relative to he region, the State actually suffered a net loss in employment between 1970 and 1975; its loss was merey not as great as that suffered in the industry by the region as a whle.[3] In all other manufacturing industries between 1970 and 1975, Mayland's record was either only slightly better than that of the region r, more frequently, was actually poorer. In non-manufacturing sectors,Maryland in the past five years appears to be no further ahead of the reion than it was in the previous ten years. Not only is this fact toublesome as indicative of no surge of non-industrial growth to replace jbs lost in manufacturing, but also because regional employment in thesesectors grew much less between 1970 and 1975 than between 1960 and 1970 and thus Maryland's apparently constant growth with reference to the regon actually represents declining rates of growth.

Are any other northeastern states successfully bucking th tide, or is the decline relatively uniform throughout the region? Ohio,which

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3 For actual employment in Maryland in 1960, 1970 and 1975, see able 4.

presents a mixed picture relative to the region between 1960 and 1970, managed to better the regional record in almost all industries between 1970 and 1975. Massachusetts is the most striking example of a real reversal in trend: from a dire situation in the 1960-1970 period, the state has significantly bettered its position relative to the region between 1970 and 1975 in almost every industry.

It appears that Maryland faces strong competition for residents and employment opportunities from not only the southeastern and southwestern "sunbelt" states, but also from other northeastern states that are developing vigorous programs to attract and retain economic activity. With this information as a backdrop, the paper will now examine other indices of Maryland's competitive appeal and the program the state has developed to exploit or compensate for them.

Table iii Regional Shares of Employment, 1960-1970 and 1970-1975: Ohio and Massachusetts (In Thousands)

	OHIO		MASSACHUSETTS	
	*	**	*	**
	1960-1970	1970-1975	1960-1970	1970-1975
Mining	5.22	3.18	-	-
Construction	-12.73	7.62	8.71	-9.38
All manufacturing	68.83	19.49	-91.58	23.30
Food and kindred products	.81	1.86	-6.15	-2.18
Textile mill, apparel and other textile products	2.34	1.42	-12.17	7.29
Lumber and wood products	2.37	0.44	-0.79	-0.29
Furniture and fixtures	-2.30	0.75	-2.47	-0.09
Paper and allied products	3.00	0.32	-4.06	-1.24
Printing and publishing	0.37	-1.02	0.31	-1.55
Chemicals and allied products	4.02	4.61	-3.28	0.66
Petroleum and coal	1.11	2.00	-	-
Rubber and plastics NEC	-12.25	2.44	-12.60	-0.28
Leather products	.91	.28	-9.61	-1.21
Stone, clay and glass	-2.36	1.04	1.52	1.69
Primary metals	-7.54	4.64	-3.58	0.47
Fabricated metal products	.90	5.33	-3.37	3.78
Machinery, except electrical	12.28	-1.58	-8.94	7.71
Electrical equipment and supplies	15.71	-18.76	-16.22	9.64
Transportation equipment	7.81	-3.11	1.59	-2.78
Instruments	3.24	.70	3.40	7.19
Transportation and Public Utilities	3.87	0.76	8.45	2.47
Wholesale and Retail Trade	-12.78	38.35	4.02	-2.25
Finance, Insurance, Real Estate	3.18	6.81	1.45	-0.59
Services	18.57	37.20	21.34	-12.58
Government	-25.32	-64.01	-47.14	-24.08
TOTAL NON-AGRICULTURAL EMPLOYMENT	9.64	51.19	-81.08	17.77

$$*E^{S}_{i_{70}} - (E^{R}_{i_{70}} / E^{R}_{i_{60}})\, E^{S}_{i_{60}}$$

$$** E^{S}_{i_{75}} - (E^{R}_{i_{75}} / E^{R}_{i_{70}})\, E^{S}_{i_{70}}$$

Source: Employment and Earnings, States and Areas, 1939-75; author's calculations

I. THE STATES: GENERAL CHARACTERISTICS

Location theory, which seeks to explain the geographic distribution of economic activity, is a well-developed field but one that often lacks empirical studies which bear out the assumptions of theoretical models. There is general agreement in both the theory and that empirical documentation which exists, however, that the critical variables to location decisions include the following:

Resources - Raw materials, natural energy sources, climate
Markets - Population, income, intermediate markets (employment), transportation
Labor - Wages, unionization, education
Quality of Life - Crime, political environment

Of course, many of the considerations which are part of a decision regarding moving or not moving a business are non-quantifiable and unpredictable: locational preferences of a plant manager, expectations of the company about future developments, inertia, limited knowledge of opportunities, inability to effectively use available information (Vaughan). The effects of such factors are most clearly seen in the results of empirical studies which rely on interviews with industrialists. These studies ask why a company moved to or opened a branch operation in a given place or what factors it would consider if it were going to move and of course suffer from the human tendency to rationalize a prior action which may or may not have been completely objective. In 1971, the Economic Development Administration of the U.S. Department of Commerce surveyed 2950 manufacturing companies in industries which had had reasonable growth between 1958 and 1967 or good prospects for growth. The last question in the survey asked respondents to select as many as three of the locational objectives to be achieved by a move. The percentage of firms selecting

each item were:

(1) Improvements in transportation efficiency or economy	45%
(2) Availability of larger parcel of land	25%
(3) Closer proximity to resources and/or major suppliers	31%
(4) Closer proximity to other plants of your company	11%
(5) Closer proximity to your distributors and/or your customers	49%
(6) Closer proximity to other firms in same or related industries	2%
(7) Ability to serve new and/or expanded markets	59%
(8) Minimize competition from other plants for labor force	33%
(9) Secure factors of location unique to your industry (special energy requirements, etc.)	10%

Source: Vaughan, p. 45

Items numbered (1), (5) and (7) are market-related factors and received a clear majority of the selections.

O'Malley & Associates, in a 1975 marketing feasibility study for Fort Holabird, present the following calculations based on the above-mentioned EDA survey, a Business Week survey and the firm's interviews with industrial development professionals in the Baltimore region:

Factor	% of industrialists considering it a primary location factor
Motor freight lines and highway accessibility	75
Proximity to markets	71
Reasonable taxes	69
Favorable labor climate	68
Size and cost of site	65
Reasonable cost of construction	60
Availability of workers	59
Labor wage rates	56
Favorable attitude of local government and population	51

Pleasant living conditions	48
Community backup services and products	47
Proximity to raw materials	43
Accessibility and cost of utilities	40

Source: O'Malley and Associates, p. 182

Once again, the two most highly rated factors are market oriented, and the following two are labor oriented.

Leonard Wheat analyzes a study done by the Fantus Company for the Appalachian Regional Commission in 1966, using material in its files obtained during several thousand plant location searches. Weighting the factors 3-2-1-0 depending on their designation as "critical", "primary", "moderate", or "minor" by respondent industries indicated each factor was critical, the results appear as follows:

Location Factor	Weighted Score	Critical Importance to # Industries
Transportation services	53	8
Transportation costs	41	8
Proximity to customers	46	8
State manpower training assistance	31	2
Labor cost advantages	24	2
Low cost electric power	24	2
Urban orientation	24	1
Proximity to raw materials	11	2

Source: Wheat, p. 17

Again, market is clearly the most important influence of those considered.

Studies of the actual location of economic activity and its correlation with the factors listed above are decidedly scarce. Wilbur Thompson and John Mattila developed in 1959 a series of predictive

multiple regression equations for growth in the 48 contiguous states between 1949 and 1954. The strongest relationship was found to be between manufacturing growth, both absolute and percentage, and prior growth in consumer demand (population and income).

Harvey Perloff emphasizes the importance of intermediate markets in historical-descriptive studies published in 1960 and 1963. Although he and his colleagues give primacy to the role of final (consumer) markets and suggest that manufacturing employment probably follows population shifts rather than causes them, they indicate that intermediate industrial markets, in which companies sell to each other in production stages before the final consumer, are important to the location decision. In this sense, industry attracts industry because of transportation costs savings and the benefits of doing business face-to-face.

Leonard Wheat's study correlating three growth variables - absolute, per capita and percentage growth in manufacturing employment between 1947 and 1963 - and a wide range of explanatory variables for the 48 contiguous states produced the following results:

	% of variance explained		
	Absolute growth	Per capita growth	Percentage growth
Market influence	55-75	35-55	50-70
Climate	14-28	15-30	15-30
Labor	3-9	7-15	3-9
Resources	1-8	1-15	1-8
Urban attraction (advanced industrialization, high wages, above-threshold development, high per capita income)	0-2	2-7	1-3

Source: Wheat, p. 209

What follows is a sketch of Maryland's competitive position with regard to each of the major variables discussed above, along with a

brief description of the political framework in each state. As will be seen, Maryland clearly possesses a market advantage, although it is no longer growing significantly. Its situation with regard to other factors however ranges from mediocre to poor, indicating obstacles to be overcome in the development of the state's economy.

A. Natural Features. The location of raw materials is of declining importance to industries today, primarily because of advances in transportation technology and consequent reduction in cost (Chinitz and Vernon). Also, more and more "raw materials" are drawn from manufactured sources rather than natural ones; industries selling to other industries now produce almost 40% of all output (Wheat). The best stands of timber or deposits are often depleted and the remaining sources more widespread (Management & Economics Research, Inc.). However, warm climate has been seen to be an important factor in attracting populations and reducing production costs which result from bad weather (Wheat). The search for energy alternatives has led to a renewed emphasis on coal development. Food processing must still take place in reasonable proximity to agricultural sources due to perishability. Pulp and paper industries generally locate near timber supplies because of the weight loss involved in processing the raw material. Of course, high volume water-users, as some of the chemical industries, are also tied to natural resource locations (Wheat). Economic activity is increased, and reliance on domestic raw materials diminished, by major international seaports.

Delaware, the first state to ratify the U.S. Constitution, is the smallest state (area: 2400 square miles) with the exception of Rhode Island. The northern section lies on the Piedmont Plateau, the remainder on the Atlantic Coastal Plain. Mineral and timber resources are limited. The entire 96 mile length of the state is bordered on the east by water -- by the Delaware River along the northeastern coast, the Delaware Bay in the mid-section of the state, and the Atlantic Ocean for 28 miles south of Lewes. The Port of Wilmington is located on the Christina River at its confluence with the Delaware River, 65 miles from the Atlantic Ocean. Delaware has a moderate climate, with a mean January temperature of 33°F and a July mean of 76°F. Annual rainfall is approximately 45 inches. The average growing season is 170-200 days.

Maryland, which set an early precedent for the colonies in the area of religious freedom, ranks 42nd among the states in size with an area of 12,303 square miles. The eastern portion of the state, from the coast to the Baltimore-Washington corridor, lies on the Coastal Plain, the mid portion on the Piedmont Plateau, and the western portion in the Appalachian Mountains. Forests cover 47% of the total land area of the state and yielded 250,000,000 board feet of products in 1974. Mineral extraction, primarily of stone, sand and gravel, accounts for .1% of the nonagricultural employment. In 1974 the minerals produced were valued at $145,386,000. Maryland is more important nationally as a mineral processor than as a producer. 1,726 square miles of the state's area are accounted for by the Chesapeake Bay, which yielded seafood valued at $22,291,195 (dockside) in 1975. The easternmost section of

the Eastern Shore of the state fronts on the Atlantic Ocean south of Delaware. The remainder of the state's 3,190 miles of tidal shoreline is along the Chesapeake Bay. The Port of Baltimore, located near the center of the state, is 174 miles from the Atlantic Ocean through the mouth of the Bay between the Virginia capes and 118 miles through the Cheapeake and Delaware Canal. The climate in Maryland varies from mild to hot in summer (75°F is mean for July) and in winter from moderate in the east and south to very cold in the western mountains (mean for January - 34°F). The average annual temperature ranges from 48°F in the west to 58°F in the lower Bay area. Average annual rainfall is 42 inches and the average length of the growing season varies between 180 and 194 days across the state.

North Carolina covers 52,586 square miles and its topography, from east to west, parallels Maryland's - Coastal Plain, Piedmont Plateau, Appalachian Mountains. Forests cover 59% of the land area; mining activity is negligible in terms of employment but important to the U.S. in its industrial minerals contributions of primary kaolin, mica, pyrophyllite, spodumene, tungsten and lithium. The state's eastern boundary is composed of 30 miles of beaches and "banks" along the Atlantic Ocean. Because of the coastal topography, with its offshore islands and peninsula, natural harbors accessible to large ocean-going vessels are scarce. The largest port is at Wilmington, about 25 miles up the Cape Fear River from the Atlantic Ocean, just northeast of the South Carolina boundary. It is not a significant port in North Atlantic commerce. The climate of North Carolina is temperate, with mean annual temperatures ranging from 42°F in the winter to 75°F in the summer. Average annual rainfall is 50 inches and the growing season ranges from 200 to 240 days free of killing frost.

Pennsylvania, granted to William Penn in 1681 by King Charles II as a haven for persecuted Quakers, has a total area of 45,333 square miles. Its topography ranges from the low-lying Atlantic Coastal Plain, to the Piedmont Plateau, the Appalachian Ridge and Valley, Appalachian Plateau, and Great Lakes Plain. Pennsylvania is one of the leading mineral-producing states - second only to West Virginia in coal production, a major domestic source of natural gas, and the nation's largest processor of stone and stone products. With regard to forestry, the state's productivity is much reduced from the past when Pennsylvania was the nation's premier lumber producer; however, forestry products remain among the state's most valuable. The state is drained by the three great river systems which shaped its history: the Delaware, the Susquehanna and the Ohio. The Delaware River is second only to the Mississippi in the United States in the amount of commerce carried annually. The Port of Philadelphia, on the Delaware, handles about 10 percent of all foreign waterborne commerce to United States ports and was the third largest U.S. handler of tonnage in 1971. The Port of Erie, a natural harbor, serves Great Lakes shipping and the St. Lawrence Seaway System. Pittsburgh, at the juncture of the Allegheny and Monogahela Rivers which forms the Ohio River, is the site of major movements of coal, steel, industrial chemicals and other manufacturing inputs and products. It is the country's largest inland port with access to the Gulf of Mexico. Pennsylvania has a continental climate, with winter temperatures averaging 22-32^{o}F and summer temperatures 66-76^{o}F. Annual rainfall averages 42 inches and the average growing season varies from 130 to 200 days across the state.

South Carolina, the first state to secede from the Union before the Civil War, covers 31,055 square miles on the South Atlantic Coast. From southeast to northwest the land features include sea islands, coastal plain, sand hills, Piedmont Plateau and the Blue Ridge Mountains. The state has no important metallic ore deposits. Three quarters of the land is forested and as crop acreage has declined with increased industrialization, more land has been utilized for forests yielding products which are important to the economy of the state: timber, pulpwood, furniture, and paper. The Port of Charleston, located in the middle of the state's 187 mile coastline, is the closest of all major east coast seaports to the open waters of the Atlantic Ocean (7.5 miles) and is the major container terminal on the South Atlantic coast. The climate in South Carolina is humid and partly subtropical, producing a lengthy growing season; mean temperatures range from 46°F in January to 80°F in July and rainfall averages 44-50 inches annually.

The Commonwealth of Virginia, covering 40,817 square miles, consists of a tidewater (Coastal Plain) region on the east, Piedmont Plateau in the middle, and mountain and valley provin-e in the west. The coal industry in western and southwestern Virginia has been reviving since the mid-1970's. The state is the United States' leading source of kyanite and is among the top ten states in the production of pyrites, titanium and limestone. Two-thirds of the land is forested. Virginia has 112 miles of general coastline and 3,315 miles of tidal shoreline. The Hampton Roads basin at the junction of the James River with the Chesapeake Bay is a major east coast port. In 1975 it led all U.S. ports in volume of exports (coal was the largest export commodity) and ranked second only

to New York in total foreign trade tonnage. The state enjoys a mderate climate, ranging from a mean winter temperature of 39°F to a summr mean of 77°F. The average growing season is 150-245 days.

West Virginia is a 27,181 square mile state of rugged topogrphy, an elevated plain which has been divided into an intricate system of hills and valleys by the action of running water. Beneath this land lie large quantities of bituminous coal, which West Virginia leads the nation in producing. It is also a leader in the production of oil and gas, salt brine and rock salt. Fifty years ago, West Virginia was the location of more varieties of hardwood trees than any other state. In the absence of a conservation policy, however, very little virgin forest remains today, although forest industries are still importnat and 10,000,000 acres are covered by commercial forests. The state has no ocean boundary and no major inland lakes. Its continental climate varies greatly due to altitude differences; the mean annual temperature is 48°F - 56°F. 45-50 inches of rain fall annually and the growing season lasts five to six months.

To summarize, the seven states, with the exception of West Virginia, have similar topography, and of the coastal states, only North Carolina lacks a major port. Mineral resources vary dramatically among the states, contributing most to the state economies in Pennsylvania and West Virginia. Outside of Delaware, the states have similar volumes of forestry resources but vary in the degree to which they exploit them. Climate and rainfall are similar throughout the region except in South Carolina, where subtropical conditions prevail.

B. Population. Population size and rate of increase is one measure of the absolute size and growth rate of consumer market. The density of population and degree of urbanization indicate the density of the market; race and age structure define its characteristics (Management and Economics Research, Inc.).

Delaware's population grew 22.8% between 1960 and 1970, and 5.7% between 1970 and 1975, to a total of 579,000 in the latter year. Between 1960 and 1970, natural increase accounted for 63% of the growth; between 1970 and 1975, for 68%. In 1974, 68.5% of the population lived in metropolitan areas, an increase of 2.4% over 1970. Wilmington is the major city; New Castle, the county in which it lies, contains 1/5 of the land area of the State and more than 2/3 of the population. The density of the population for the state as a whole in 1975 was 241.3 persons per square mile. In 1970, 14.3% of the citizens of the state were black. The age distribution and birth rate for Delaware are average for the seven state area.

The population of Maryland grew from 3,113,000 to 3,938,000 between 1960 and 1970, an increase of 26.5%. Only 53% of the increase was due to natural increase, the remainder to inmigration. From 1970 to 1975, the population grew 4.4% to 4,098,000, primarily as a result of natural increase (79%). In 1974, 85.5% of the people of Maryland lived in metropolitan areas, a 4.1% increase over the 1970 measurement and substantially above the total United States figure of 73.3%. Maryland contained an average of 333.1 persons per square mile in 1975. Baltimore is the major metropolitan area, accounting for 50% of the state's population, and the District of Columbia suburbs are also an important

contributor to the urbanized character of the state. In 1970, 17.8% of the residents of the state were black, and the 1974 state birth rate was 13.1 per 1,000 population, 1.8 births per thousand lower than the U.S. rate. The age distribution of the population parallels that of the other six states, with slightly fewer very young and very old residents.

North Carolina's population grew between 1960 and 1970 from 4,573,000 to 5,098,000, an 11.5% increase which was 118% attributable to natural increase as net migration was negative. Net migration contributed positively (37%) however, to the 7.2% growth from 1970 to 1975, when the population totaled 5,451,000. Only 45.3% of the population of the state resided in metropolitan areas in 1974, but this represented a 6.6% increase over 1970. The state has historically been characterized by a fairly even distribution of small towns and the lack of large urban centers. Since 1900, the population centers in the industrial piedmont have outgrown those in the agricultural east. Charlotte, with an SMSA population of 589,000 in 1974, is the largest city and a center of diversified manufacturing and wholesale trade. Other urban areas tend to be based on tobacco, textile and furniture industries. The 1976 density of population throughout the state averaged 103.7 persons per square mile, and in 1970, 22.2% of the population was black. The 1974 birth rate was 15.7 per 1,000 population and the population tended to be slightly higher in the age 5 and under and age 65 and over categories than in the region as a whole.

Pennsylvania, the most populous state in the region, experienced moderate population growth (4.2%) between 1960 and 1970 and minimal growth (0.2%) between 1970 and 1975. The population in the latter year was 11,827,000. The increases in both time periods were heavily dependent

on natural increase as the state experienced net out-migration in both cases. 80.6% of the population lived in metropolitan areas in 1974, and the state had an average density of 260.9 persons per square mile. Philadelphia is the fourth largest city in the U.S. and Pittsburgh is a major center of iron and steel manufacture. 8.6% of the population was black in 1970. The birth rate per 1,000 population was 12.8 in 1974, significantly below the U.S. rate. The age distribution of the population is characterized by a heavy concentration in the 65+ age bracket.

South Carolina's population has grown steadily since 1960, 8.7% between 1960 and 1970 and 8.8% between 1970 and 1975, to a total of 2,818,000. In the first time period, net outmigration meant that the increase was more than 100% due to natural increase, but between 1970 and 1975, inmigration accounted for 38% of the growth. 48.3% of all South Carolinians lived in metropolitan areas in 1974, an increase of 9.4% over the 1970 urbanization. Charleston, with a 1974 SMSA population of 362,000, is the largest metropolitan area, although Columbia is a larger city. There is an average of 90.7 persons per square mile in the state, and 30.5% of the population is black. The birth rate, 17.4, is quite high. The age distribution is light on the upper end and heavy between infancy and age 17.

Virginia's population grew rather rapidly (17.2%) between 1960 and 1970 to 4,659,000. Natural increase accounted for 79% of the increase, a portion which dropped to 60% in the 6.8% growth between 1970 and 1975. 65.7% of the 1974 population lived in metropolitan areas, an increase of 5.2% over the 1970 proportion. Over half of Virginia's population lives within the urban corridor extending from Washington, D.C. south to Richmond and southeast to Newport News. 18.5% of the residents are black, and

the state's birth rate is 14.5 per 1,000 population. The 1975 age distribution of the population is similar to that for the region, with a slight concentration in the 18-64 age group.

West Virginia suffered the largest percentage loss in population of any state in the United States between 1960 and 1970. Its population declined 6.2% from 1,853,000 to 1,751,000. Net outmigration outstripped natural increase. Between 1970 and 1975, the population grew 3.4% positively to 1,803,000, 80% attributable to natural increase and 20% to inmigration. In 1974, only 37% of the population resided in metropolitan areas and this represented a decline of 0.7% over 1970. Huntington, an industrial center in the western part of the state, and Charleston, the state capital, are the largest cities; they are the only two in the state with population greater than 50,000 in 1970. The density and percentage of black are both low. The birth rate was 15.6 in 1974 and the age distribution for the following year shows a concentration of population in the over 65 category.

Looking at the seven states comparatively, it appears that the velocity of recent population growth increases as one moves southward. Pennsylvania, West Virginia, and Maryland were the slowest growing states between 1970 and 1975. Maryland, in which inmigration accounted for the largest proportion of growth between 1960 and 1970, was the only state of the seven which experienced a substantial decrease in net migration (in-migration) between 1960-1970 and 1970-1975. Pennsylvania alone among the states examined continued to suffer outmigration in the 1970-1975 time period. Maryland and Pennsylvania are the most urbanized states in the group, more so than the nation as a whole, while Delaware and Virginia fall below the national average but above 50%. West Virginia

shares the under-urbanized characteristics and high birth rates of the Carolinas, but differs sharply from these states in the proportion of state population which is black. The larger concentrations of black residents in the southern states, including Maryland, indicates that the northward urban migration of southern blacks was not total, or alternatively, has not been completed. South Carolina has the most youthful population, Pennsylvania and West Virginia the oldest. Virginia and Maryland have the largest percentage concentrations of population in the income-productive age group.

TABLE 1. POPULATION

	Population Growth					Components of Population Growth											
						1960-1970		1970-1975		1974				Birth rate	1975 % Age Distribution			
	1960 (000)	1970 (000)	1975 (00)	1960-70 % Chg	1970-75 % Chg	Natural Increase (000)	Net Migration (000)	Natural Increase (000)	Net Migration (000)	% in Metro areas US=73.3	% chng 1970-74	1975 Density persons /sq. mi.	1970 % black US=11.1	1974 (per 1000 pop.) US=14.9	Under 5 years	5-17 years	18-64 years	15+ years
DEL	449	551	579	22.8	5.7	64 (63%)	38	21 (68%)	9	68.5	2.4	241.3	14.3	14.4	7.4	24.4	59.6	8.7
MD	3113	3938	4098	26.5	4.4	437 (53%)	385	138 (79%)	37	85.5	4.1	333.1	17.8	13.1	6.9	24.5	60.3	8.3
NC	4573	5098	5451	11.5	7.2	620 (118%)	-94	230 (63%)	137	45.3	6.6	103.7	22.2	15.7	7.9	23.5	59.5	9.0
PA	11329	11813	11827	4.2	0.2	853 (180%)	-378	208 (800%)	-182	80.6	-0.4	260.9	8.6	12.8	6.6	22.7	59.1	11.6
SC	2392	2597	2818	8.7	8.8	357 (172%)	-149	140 (62%)	88	48.3	9.4	90.7	30.5	17.4	8.6	24.9	58.4	8.1
VA	3986	4659	4967	17.2	6.8	540 (79%)	141	190 (60%)	125	65.7	5.2	121.7	18.5	14.5	7.3	23.6	60.5	8.5
WVA	1853	1751	1803	-6.2	3.4	149	-265	47 (80%)	11	37.0	-0.7	74.6	3.9	15.6	7.7	22.7	57.9	11.7

Source: U.S. Bureau of the Census, Statistical Abstract of the United States: 1976. Washington, D.C., 1976.

C. Income and Employment. Personal income is a measure of economic well-being and purchasing power which adds to wages and salaries the additional income received by persons from transfer payments (welfare, etc.), corporate profits, and sources outside the state. With regard to the latter, it is important to note that the employment and earnings information which is presented is on an establishment basis, whereas the personal income data is on a place-of-residence basis. Thus commuters to Washington, D.C. will show up for the first time in the Maryland and Virginia income totals.

Through 1960, 1970 and 1975 the personal income per capita ranking of the studied remained the same: (highest to lowest) Delaware, Maryland, Pennsylvania, Virginia, West Virginia, North Carolina, and South Carolina.[4] During these time periods all the states experienced growth in personal income. From 1960 to 1970, income in South Carolina and North Carolina grew by over 100%, in Virginia by 99.1%, in West Virginia by 88.8% and in Maryland by 84.1%. Growth in Pennsylvania and Delaware was 75.0% and 62.4% respectively, below the national percentage change of 78.5%. Between 1970 and 1975 income in all seven states grew between 47.6% (N.C.) and 57.3% (W.Va.). All were above the national average growth of 47.1%. Despite the rapid income growth in the southern states in the 1960's and relatively uniform growth of the states in the 1970's, the gap between personal income in the lowest income state and that in the highest income state has been steadily widening: $1388 in 1960,

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[4] In 1970, West Virginia fell below North Carolina.

$1534 in 1970, and $2278 in 1975. An historical and continuing disparity between the southern and northern states may be considerably overstated by this per capita measure, however, due to the growth of population in the south.

Each of the states under study has a unique economy which is reflected in its employment structure, the result of the natural and historical features described earlier. Clearly, this is the base on which public policies for economic development are built, and appreciation of the similarities and differences among the states' economies enhances understanding of the relative success and failure of different policies in different states.

Agriculture in Delaware employed 5.1% of the population in 1960 and 2.3% in 1970.[5] Livestock and livestock products accounted for 70% of the $270 million cash farm income produced, crops the remaining 30%. Employment in manufacturing has declined as a percentage of total nonagricultural employment - 38.2% in 1960, 33.4% in 1970, and 29.4% in 1975 - and also in real terms between 1970 and 1975 (from 71,200 to 66,700 jobs). Manufacturing in Delaware is dominated by the chemicals industry, which has historically accounted for about 15% of the nonagricultural employment. However, after growth between 1960 and 1970 which paced overall growth in the state, the industry has demonstrated slight real declines in employment in the past five to seven years which bode ill for the future. Expanding employment in services and government, particularly the former, are almost solely responsible for Delaware's growth in the present decade.

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5 These and additional state agriculture statistics are taken from the 1960 and 1970 Census of Population, parts 9, 22, 35, 40, 42, 48, 50, Table 183.

Maryland is not an important agricultural state, but farming, for the 1.8% of all employed persons who engage in it, is relatively profitable due to good transportation and proximity to large markets. Maryland has traditionally enjoyed a diversified economy, balancing manufacturing and trade. As documented in the Maryland Economy: Status and Outlook report of the Maryland Department of Economic and Community Development (DECD), however, manufacturing has declined in the state both in real terms and in the percentage of total non-agricultural employment it represents. In 1960, 29.0% of non-farm workers were engaged in manufacturing; by 1975 only 16.1% were so employed, a substantial margin below the other six states studied and the national average of 23.8%. This decline has been led in the 1970's by downward employment trends in the chemicals, apparel, and primary metals industries. Concurrently, the percentage and absolute numbers of Marylanders engaged in wholesale and retail trade, services and government activities increased rapidly. Trade, which accounted for 21.3% of non-agricultural employment in 1960, accounted for 24.9% in 1975, highest of the seven states. Services employment grew in the same period from 13.7% to 20.0%, again the highest of the states studied. Only Virginia has a higher percentage of government employment, which grew in Maryland from 15.9% in 1960 to 21.2% in 1975.

North Carolina and South Carolina were the only two states of the seven which had agricultural employment in 1970 which exceeded the 3.5% national average. North Carolina's 4.9% (of all employed persons) in farming represented a substantial decline, however, from the 13.0% engaged in farming in 1960. 55% of the state's population lives on farms or in non-farm rural areas. Top cash crops include tobacco, cotton, peanuts, corn, and dairy products and cash farm income was more than 20% as large as value added by manufacturing. North Carolina's manufac-

turing activity is concentrated in natural resource and agriculture-based industries - the state is the largest U.S. maker of textiles, tobacco products, and furniture. Agriculture and forestry-oriented manufacture is of decreasing significance, however, accounting for 415,900 of 509,300 manufacturing jobs in 1960, 537,300 of 718,400 jobs in 1970 and 525,000 of 736,500 jobs in 1975. Only the furniture and fixtures industry is growing appreciably. As in the other six states, manufacturing overall is declining in North Carolina in the percentage of citizens employed, from 42.6% in 1960 to 36.9% in 1975. Employment gains were most importantly registered in the fabricated metals and non-electrical machinery industries. Retail and wholesale trade increased its relatively small share of total employment but slightly between 1960 and 1970. Services were the most rapid gainers, but the 1975 percentage, 13.0%, was still well below the national average of 18.2%. Government has employed a steadily increasing percentage of North Carolinians, from 13.7% in 1960 to 15.7% in 1975. Rapidly growing state and local education employment has been a primary contributor to government sector increases.

Agriculture in Pennsylvania is concentrated in the southeastern counties of Lancaster, York, and Berks, employed 1.8% of the total work force in 1970, but contributed a noteworthy $1.622 billion in cash farm income to the state's economy. Livestock and related products are the leading agricultural products, but it is interesting to note that buckwheat, leaf tobacco, and mushrooms are the top cash crops. The production of metals is Pennsylvania's major industry, however, and although the initial phase, mining, only employed 1.0% of the people in 1975, mineral production valued at $2.375 billion was added to the state's economy. By far the largest manufacturing employer is the primary metals industry,

but it has been declining in the last two decades, both in real terms and as a percentage of total employment: 252,900 employees in 1960, 244,700 in 1970, 215,100 in 1975; 6.8% of employment in 1960, 5.6% in 1970, and 4.9% in 1975. As in the other states, manufacturing generally has declined in importance in the economy from 38.8% in 1960 to 30.2% in 1975. The only manufacturing sector which has experienced increasing employment in this period in Pennsylvania is non-electrical machinery, the second largest manufacturing employer. The share of employment accounted for by trade and government has been steadily increasing, as has that by services, but rather more rapidly.

Agriculture in South Carolina has continued as a vital factor in the economy, producing $829 million in cash farm income in 1975 and employing 3.8% of the employed workers. The state is now concentrating on processing farm products for worldwide markets, and the leading products are tobacco, soybeans, cotton, poultry, cattle, hogs, corn, truck crops, and peaches. Food processing employment grew rapidly between 1960 and 1970, but has declined slightly in this decade. Manufacturing activities generally employed 34.4% (second only to North Carolina) of the non-agricultural workers in 1975, a decline from 42.0% in 1960. The textile industry has dominated the state since the late 19th C., but significant growth in the 1970's is apparent in printing and publishing, chemicals, fabricated metals, electrical equipment, and particularly in non-electrical machinery. Retail and wholesale trade has increased its share of employment slightly after a decline in 1970, but it remains below the national average. Services have shown more rapid growth but are also well under the national average. The government sector has greatly expanded between 1960 and 1975, in part due to heavy federal government investment in three major military complexes: Fort Jackson in Columbia, Shaw Air Force Base

in Sumter and naval, air and submarine bases in Charleston. South Carolina was third in the study group behind Virginia and Maryland in the percentage of non-agricultural workers who were government employees.

The relative importance of agriculture in Virginia has declined since 1945 such that, in 1970, only 3.1% of the employed workers were engaged in farming. The state has been economically sustained by the rapid mid-20th century growth of federal government and military agencies; government workers accounted for the highest percentage of employment in the state, higher than any other state examined. Manufacturing, primarily light industry, has been second in importance, employing 20.9% of the non-agricultural workers in 1975. Noteworthy growth has taken place in the fabricated metals, non-electrical machinery, electrical equipment, and transportation equipment industries. Retail and wholesale trade has declined in significance as an employer since 1960, and is below the national average. Services have grown substantially but still account for a smaller percentage of employment in Virginia than nationally.

Farming in West Virginia is widely practiced but no longer a significant source of income. The economy of the state is diversified, balancing manufacture, commerce, and mining. Primary metals and stone, clay and glass products are the leading manufacturing industries, and both have declined in number of persons employed since 1970. Altogether, manufacturing employs 21.3% of the non-agricultural employed population. Wholesale and retail trade employs 19.5%, an increase over 1960 after a decline in 1970. Mining accounted for 11.0% of employment in 1975, an increase of 9.7% in 1970, which represented a decline from the 1960 percentage of 12.2. The importance of mineral production to the state's economy is greater than is indicated by employment, however. Value of mineral production was only slightly less than value added by manufacturing in 1973 and 1974. The service

sector has been growing steadily since 1960.

An overview of the employment structures in the seven states is best presented in tabular form:

TABLE 2 . Employment Structure

	DEL	MD	NC	PA	SC	VA	WVA	U.S.
% of all employment in agriculture								
1960	5.1	3.5	13.0	2.7	11.9	7.8	4.4	6.7
1970	2.3	1.8	4.9	1.6	3.8	3.1	2.0	3.5
% of non-agricultural employment:								
MINING								
1960	-	1.9	.3	1.6	.3	1.6	12.2	
1970	-	1.9	.2	.9	.2	1.0	9.7	
1975	-	1.7	.2	1.0	.2	1.2	11.0	1.0
MANUFACTURING								
1960	38.2	29.0	42.6	38.8	42.0	27.0	27.1	
1970	33.4	20.8	40.3	35.0	40.4	24.0	24.5	
1975	29.4	16.1	36.9	30.2	34.4	20.9	21.3	23.8
TRADE								
1960	19.0	21.3	18.4	18.7	17.7	21.4	18.4	
1970	20.9	23.4	18.2	19.0	16.8	20.0	17.8	
1975	20.5	24.9	18.7	20.2	17.9	20.5	19.5	22.1
SERVICES								
1960	12.5	13.7	10.6	13.4	9.5	12.2	11.1	
1970	14.4	18.2	12.0	15.8	10.7	14.5	12.9	
1975	16.4	20.0	13.0	18.1	12.6	16.6	14.0	18.2
GOVERNMENT								
1960	12.2	15.9	13.7	11.7	16.5	18.8	14.7	
1970	15.2	19.1	14.8	14.2	17.8	23.4	18.6	
1975	16.9	21.2	15.7	15.6	20.5	24.1	19.2	19.1

Source: Computed from data presented in Table 4.

As can be readily observed, manufacturing plays the smallest role in the Maryland economy, the largest in the Carolinas. West Virginia

and Delaware are closest to the national average. On the other hand, trade and services are most heavily represented in the Maryland economy and government employment is second only to Virginia. In fact, only in Maryland, of the seven states examined, are the service and trade sectors developed to at least the extent that they are nationally.

It is not suggested that all states aspire to a national average mix of economic activity but rather that the varying employment structures have different degrees of attractiveness for different relocating businesses and call for different economic development strategies.

TABLE 3. Income, employment, and value of production.

	Labor force June 1977 (000)	% unempl. June '77	Personal income per capita 1960	1970	1975	Cash farm income 1975	Value of mineral production 1974 (millions of dollars)	Value added by manuf. 1973
DELAWARE	266.8	7.6	$2785	$4524	$6799	270	5	1448
MARYLAND	1943.6	5.6	2341	4309	6437	666	173	5257
NORTH CAROLINA	2638.0	5.4	1590	3252	4801	2673	156	12,593
PENNSYLVANIA	5142.0	6.5	2269	3971	5874	1622	2375	26,818
SOUTH CAROLINA	1306.4	5.6	1397	2990	4521	829	105	5853
VIRGINIA	2416.9	5.6	1864	3712	5671	1008	1058	6875
WEST VIRGINIA	693.9	5.8	1621	3061	4815	145	2403	2884
U.S.			2222	3966	5834			

Soutces: U.S. Bureau of the Census, Statistical Abstract of the United States: 1976. Washington, D.C., 1976. Tables No. 644, 1197, 1196, 1312.
U.S. Department of Labor, Bureau of Labor Statistics, Employment and Earnings, Vol. 24, No. 8, August 1977.

Table 4. Non-agricultural Employment (in thousands)

Industry	Delaware			Maryland			North Carolina			Pennsylvania			South Carolina			Virginia			West Virginia		
	1960	1970	1975	1960	1970	1975	1960	1970	1975	1960	1970	1975	1960	1970	1975	1960	1970	1975	1960	1970	1975
Mining				1.9	1.9	1.7	3.3	3.9	3.9	58.4	39.6	46.5	1.6	1.7	1.9	16.8	15.3	20.3	56.3	49.9	61.5
Contract Construction	10.5	13.7	15.1	61.4	88.4	91.9	65.2	96.5	116.4	157.4	195.4	187.4	34.6	51.5	61.4	66.8	95.0	104.9	18.4	28.6	26.2
Food & kindred products	6.3	8.3	7.7	38.1	38.8	31.2	33.5	41.4	39.1	115.9	113.4	99.0	11.6	14.6	13.0	32.9	35.4	36.9	8.9	6.8	5.4
Tobacco							32.3	28.7	30.7	13.1	9.0	5.1				14.0	15.2	16.1			
Textile Mill products	2.2	1.3	.9	2.8	2.3	1.4	222.8	280.7	259.0	73.8	65.2	50.1	131.6	148.8	134.1	36.2	43.5	41.4			
Apparel & other textile prod.	4.2	3.4	3.3	22.9	22.4	16.9	35.3	75.1	76.9	168.1	171.2	133.1	30.4	44.3	41.7	23.4	38.0	34.1	3.9	5.5	5.7
Lumber & wood products				5.0	3.7	3.5	33.5	27.2	26.8	14.1	14.0	12.7	17.5	14.0	12.9	24.5	22.4	17.3	8.1	7.4	6.4
Furniture & fixtures				5.3	5.4	3.8	44.6	66.2	73.9	23.7	27.8	22.1	3.3	4.6	3.9	17.1	24.4	24.1			
Paper & allied products				8.4	10.2	9.4	13.9	18.0	18.6	40.5	48.7	39.6	8.2	12.1	12.8	11.6	14.4	12.6			
Printing & publishing	1.4	1.6	1.6	13.7	20.2	19.5	9.6	14.7	15.7	66.0	69.0	67.7	3.5	4.9	6.1	10.3	14.4	16.7	3.6	4.3	4.3
Chemicals & allied products	23.3	31.9	31.4	16.3	17.4	13.6	14.0	27.7	37.2	56.7	61.8	55.8	12.9	25.9	29.7	32.6	41.6	34.8	27.6	27.0	23.9
Petroleum & coal				1.2	.9	1.2				22.5	20.0	17.0									
Rubber & plastics NEC	2.5	3.2	2.4	9.0	11.1	9.2	-	-	16.4	21.0	35.4	33.9				3.6	9.4	9.3	-	-	2.3
Leather products	1.7	1.6	.9	2.6	2.5	1.6				33.4	28.0	19.8				5.4	5.4	4.0			
Stone, clay & glass products				10.2	11.0	9.9	10.4	14.8	15.0	68.7	64.6	60.9	7.0	11.0	10.9	8.5	10.9	11.7	22.4	19.2	17.3
Primary metals	2.3	2.3	2.2	42.2	42.3	30.6	2.5	5.6	5.7	252.9	244.7	215.1				7.0	10.2	10.3	25.1	25.4	24.0
Fabricated metal products	1.9	1.8	2.0	-	13.2	12.3	8.5	16.0	19.7	108.0	112.2	101.9	-	7.5	9.7	8.7	12.7	17.1	7.0	7.5	7.8
Machinery, except electrical				11.7	15.4	14.0	12.5	29.3	36.1	118.4	137.9	141.1	5.7	15.9	22.9	5.0	9.8	12.0	-	5.4	6.7
Electrical equip. & supplies				14.4	17.2	16.8	25.4	40.9	38.9	132.5	152.6	124.4	-	13.2	15.6	8.9	24.1	29.5	-	4.9	4.0
Transportation equipment				25.9	24.6	23.1	3.8	8.2	11.9	51.1	72.2	70.8				20.0	27.2	32.1	-	3.8	3.4
Instruments										28.8	37.5	33.3	-	3.1	3.7	1.8	2.4	2.8			
Miscellaneous manuf'ing										27.6	28.3	26.6				-	-	3.5			
Transp & other public utilities	11.1	11.3	11.5	72.2	81.0	78.7	64.5	92.1	99.8	277.9	266.8	256.2	25.5	37.5	40.3	83.3	97.4	102.7	44.4	41.5	39.2
Wholesale & retail trade	29.2	44.6	46.4	190.7	304.0	355.3	219.8	324.5	373.4	694.1	827.9	890.9	103.1	141.8	175.5	217.4	303.6	360.3	84.5	91.8	109.2
Finance, insurance & real estate	6.2	9.2	11.5	44.3	68.6	79.5	42.1	69.5	86.4	153.4	190.6	208.1	21.3	29.7	39.4	43.5	68.0	87.0	13.3	15.7	18.1
Services	19.3	30.6	37.2	123.2	236.7	285.4	127.1	213.6	265.6	495.9	685.1	800.3	55.5	89.8	122.8	123.7	220.0	291.3	51.1	66.8	79.1
Government	18.7	32.5	38.2	142.8	249.0	301.9	164.2	264.2	314.3	436.2	618.7	690.6	96.1	149.9	200.1	191.1	355.1*	422.2	67.5	95.9	107.8
Total non-agricultural	153.8	213.1	226.6	896.4	1300.7	1424.3	1195.5	1782.7	1996.3	3712.9	4347.3	4415.9	582.5	842.0	977.8	1017.6	1519.6*	1755.0	460.0	516.7	561.1

Source: U.S. Department of Labor, Bureau of Labor Statistics, Employment and Earnings, States and Areas 1939-75.

*not comparable with previous years.

D. Transportation. Transportation services and costs are marketing factors because they affect the cost of getting a product to its purchaser. Chinitz and Vernon found transportation costs to be critical to the decentralization of industry. Railroad development in the last century made large scale production at a raw materials source profitable, for rail freight was most economical on long-hauls. The motor vehicle brought to the twentieth century reduced costs for short hauls relative to long hauls and thus the advantage of locating at several points near major markets increased. However, the availability of piggyback, fishyback and air freight services are helping to minimize the disadvantage of distant locations relative to markets.

Delaware has the largest number of miles of primary federal highway per square miles of area (1:4) of the seven states examined, primarily in north-south arteries. I-95 crosses the northern hook of the state and I-295 and I-495 further serve the Wilmington area and points northeast. The port of Wilmington handles more than a million tons of cargo each year but is not among the top 30 U.S. seaports. The Wilmington airport is serviced by only one passenger carrier; major service is provided by Philadelphia International Airport, 40 minutes by car from Wilmington. The Conrail and Chessie Systems link Delaware to the interstate rail network.[6]

Maryland has slightly more than one mile of primary federal highway for each five miles of area. Four interstate radials will eventually center in Baltimore, which is served by 113 motor freight lines and 98

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[6] Delaware Division of Economic Development, DCAED, Delaware: The Perfect Setting. Dover, p. 3.

motor freight terminals.[7] 45.5% of the commodity shipments which originate in the state move by motor carrier and 15.0% by private truck. The port of Baltimore, like the major Atlantic ports north of it, is primarily a receiving port, but exports have been growing in volume and value while imports have been on the decline. Baltimore rates fifth among the U.S. ports in export tonnage, fourth in value of exports, sixth in import tonnage, and ninth in value of imports. Maryland's in-state airport, Baltimore-Washington International, is served by 13 major passenger carriers; Washington National, an hour from Baltimore, is served by 10 airlines; Dulles International also serves the state's population. Three regional airports are served by scheduled airlines and 39 others provide facilities for business aircraft. The Chessie System (C&O/B&O and the Western Maryland Railway), Conrail, the Norfolk and Western, and the Canton Railroads operate in Maryland and provide rapid direct transportation or connection facilities with every major U.S. city.[8]

North Carolina has less than one mile of primary federal highway for each 10 square miles of area, the lowest of the seven states. Its total 90,000 mile highway system, however, has been rated, according to the state's development agency, as one of the top systems in the nation.

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7 All motor freight information is from the American Trucking Association, American Motor Carrier Directory, 1975.

8 Maryland Division of Business and Industrial Development, DECD, Maryland: Basic Plant Location Data. Annapolis, 1976, pp. 12-13.

Five interstate highways traverse North Carolina from north to south and east to west. Charlotte is served by 4 interstate radials, 61 motor freight lines and 51 terminals. The port of Wilmington handled about ten times as many imports as exports in 1975 and 1976, ranking 23rd in the U.S., right behind Charleston, S.C. in tonnage imported. The value of its imports were less than half those in South Carolina, however, although value has grown in the face of a decline in tonnage. Five commercial airlines operating out of 12 airports serve the state's passengers. 187 small airports receive non-commercial flights. 91 of the state's 100 counties are served by 22 railroad companies. Over half (51.9%) of all commodity shipments are moved by rail.[9]

The pattern of commodity shipments in Pennsylvania closely resembles Maryland, with a clear dominance of the highway mode. Pennsylvania has slightly less than one mile of primary highway per five square miles of area. Over 5% of commodities originating in the state, however, are shipped by water, more than three times the percentage for Maryland and over twice that of Virignia. The port of Philadelphia, which ranks fifth in total foreign commerce among U.S. ports, is also an importing center. It ranked third in imports in 1976, with tonnage more than 50% greater than Baltimore. In value of imports, however, Philadelphia ranked sixth and exceeded Baltimore only slightly. The state has four international airports located evenly across the state and commercial scheduled service operates out of 16 other cities. Major regional railroads criss-cross the state and aid in the movement of raw materials and goods to market centers throughout the country.[10]

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[9] North Carolina Division of Economic Development, DENR, Factors Favorable to Industry in North Carolina. Raleigh.

[10] Pennsylvania Department of Commerce, Pennsylvania: The State of the Nation. Harrisburg.

South Carolina has only a little less than one mile of primary federal highway for each five square miles of area, far exceeding the other southern states in the study in this category. Five interstate radials converge on Columbia. The modal split for commodity shipments is almost even between rail and highway (common carriers plus private truck). Charleston is served by 39 motor freight lines and 27 terminals. Southern and Seaboard Coast Line are the two major railroads. The state's principal seaport is Charleston, primarily a receiving port. It is notable for the high value of the cargo which passes through it; in 1976, for example, the exports which made up only two-fifth of the total tonnage were valued one third higher than the imports through Charleston and were almost twice as high as Newport News, through which was exported more than four times as much tonnage. The value of imports coming through Charleston is also high. The six commercial airports in South Carolina are served by three trunk carriers and two feeder lines. The Ports Authority operates an inland port at the Greenville-Spartanburg Airport.[11]

Virginia has a low ratio of primary federal highway to area - a little over one to ten. There will be six Interstate routes crossing Virginia when completed in the next decade, 4 of which will have radials centered on Richmond, which has 49 motor freight lines and 42 terminals. Almost as much commodity shipping is done by rail as by road, however. Five major north-south rail lines and two major east-west lines which converge on the Hampton Road terminals serve the state. The Port of Hampton Roads includes Newport News and Norfolk, along with Portsmouth and Chesapeake.

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[11] South Carolina Development Board, South Carolina: Profile for Profit. Columbia.

E. Labor Climate and Earnings. Prevailing wage rates are of critical importance to most industries, not just those which are highly labor intensive. The rates differ from region to region and also, to an even greater extent, between urban and rural areas. Union organization, collective bargaining, and federal minimum wage laws are contributing to a narrowing of interregional and urban/rural wage differences, as is the migration of industry itself, which usually raises the prevailing rate in rural areas. Chinitz and Vernon point out that the narrowing has been slow and spotty, however, and Perloff talks about the tendency of industry to "fill in" the blank (unurbanized) spaces on the maps of the south and west, taking advantage of pockets of low wage labor.

1975 average hourly earnings varied widely among the states and among different industries. For manufacturing generally, Delaware's workers were the highest paid ($5.07/hour), particularly those in the Wilmington metropolitan area ($5.71). The statewide average and largest metropolitan area rates, arranged in descending order, were Maryland ($5.03 and $5.25), Pennsylvania ($4.96 and $5.09), West Virginia ($4.90 and $5.51), Virginia ($3.99 and $4.63), South Carolina ($3.59 and $3.58), and North Carolina ($3.51 and $3.84). When manufacturing was broken down into durable and non-durable goods categories, the ranking remained almost exactly the same, although in nondurable goods the range of state differences was about $1.00 shorter than for manufacturing generally or for durable goods. This was balanced, however, by marked differences in earnings between the states taken whole and their largest metropolitan areas, suggesting that at least in the area of non-durable goods, wage differentials may be most importantly affected by location within the states.

When the earnings data is further disaggregated, by industry, for states and their largest metropolitan areas, the following findings can be reported, with the caution that the information is not complete, as is apparent in Table 5. In the food and kindred products industry, earnings are highest in the Baltimore SMSA and among the states, in Pennsylvania. Textile mill products, apparel, and textile products workers earn low wages in all states, but particularly in North Carolina, South Carolina, and Virginia. Maryland's wages generally compare well with the southern states in the textile mill products industry, but far exceed those states in the apparel industries.

The average hourly earnings of Maryland workers in the paper industry are by far the lowest of the five states reporting in this category. Surprisingly, South Carolina, Virginia, and North Carolina had the highest paid workers in this industry. In printing and publishing, however, Delaware, Maryland and Pennsylvania were once again the high wage states and Virginia, West Virginia, South Carolina, and North Carolina the low wage states.

In the chemicals industry, the highest paying non-durable industry, the Wilmington SMSA led the study group, followed by the Charleston, West Virginia SMSA, West Virginia as a whole, and Delaware. The other states ranked in descending order were Maryland, Pennsylvania, Virginia, South Carolina, and North Carolina. It is important to note, however, that the range was very short - Virginia was only $.01 less than Pennsylvania and Richmond chemical workers actually enjoyed wages $.18/hour higher than Baltimore employees in the industry.

Maryland primary metals workers earned substantially more per hour ($6.80) than those in all other states except West Virginia ($6.75). Pennsylvania was also fairly high ($6.30) but the remaining states were well below these rates ($5.51, $4.97, and $4.09). The range in the fabricated metals industry was not as wide and in this area, Pennsylvania led the region in wages, followed by Maryland, Delaware, Virginia, West Virginia, North Carolina, and South Carolina.

In the machinery, electrical equipment and transportation equipment industries, Delaware, Maryland and Pennsylvania once again paid the highest wages, followed by West Virginia and Virginia and finally the Carolinas.

To summarize, Maryland, Delaware and Pennsylvania led the study region in most industries in earnings of production workers, as might be expected of this southern fringe area of the industrial northeast. West Virginia is unique in its position as the least urbanized state studied which nevertheless has relatively high earnings by production workers. Virginia shows movement toward the wage scales of its northern neighbors while the Carolinas, particularly North Carolina, remain relatively low. The only exception to this general picture occurs in the paper industry, where the more southern states exhibit higher wages. This appears to be due to the breakdown of employment within the paper and allied products category between pulp, paper and paperboard mills on the one hand (SIC 261, 262 and 263) and paper products, paperboard products, and paperboard containers and boxes (SIC 264, 265) on the other. The former are more technologically complex industries, pay higher wages and tend to be located near the supply of the natural

resource - in this case - the Piedmont Plateau and Appalachian Ridge of the Carolinas, Pennsylvania and Virginia. Most of the northern states' paper industry employment is in the lower paying containers and boxes industry.*

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* The author is indebted to Dr. Richard Weissbrod for his comments in this regard.

Three of the states studied have right to work laws: North Carolina, South Carolina and Virginia. Labor union membership is lowest in North Carolina, where only 6.9% of the non-agricultural workers are union members. South Carolina and Virginia also exhibit low union membership - 8.0% and 13.8%. Delaware and Maryland have similar amounts of organized labor activity, with union membership slightly over 20%. Pennsylvania and West Virginia have the highest rates of unionization--37.5% and 38.2%.

When work stoppage information is examined, Pennsylvania far exceeds West Virginia despite similar unionization rates. The surprising finding is the significant work stoppage activity found in Virginia, and to a lesser extent, North Carolina. The latter exceeded Maryland in days idle and Virginia, a more comparably sized state, lost more than twice as many days to job actions as did Maryland. These findings suggest, as pointed out in a recent article by A. Samuel Cook in Maryland Business,[14] that no right to work laws prevent employees from joining unions voluntarily and furthermore, that unions penetrating the south tend to be radical and aggressive, as were the earlier northern union leaders. Mr. Cook points to labor activity at J. P. Stevens, "capitulation" clauses in automakers contracts allowing union organization at new southern plants, increasing employment of blacks in southern industry, and the successful efforts of the AFL-CIO to lobby the Labor Reform Law through Congress as harbingers of increased union activity in the south. Although his article is clearly written with a Maryland bias, the limited data presented herein tends to support, with the exception of South Carolina, Mr. Cook's view.

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[14]August 9, 1977.

TABLE 6. Average hourly earnings of production or nonsupervisory workers, 1975 (in dollars)

Industry	Delaware	Wilmington SMSA	Maryland	Baltimore SMSA	North Carolina	Greensboro Winston-Salem High Point	Pennsylvania	Philadelphia SMSA	South Carolina	Greenville Spartanburg	Virginia	Richmond SMSA	West Virginia	Charleston SMSA
Mining					3.65									
Contract Construction														
Food & Kindred products	3.69	4.43	4.31	4.98	3.41	4.04	4.61	4.90	3.12		3.45	3.55	3.49	3.86
Tobacco					4.77		3.16	3.44			5.03	5.20		
Textile Mill Products	3.73	3.76	3.31	3.63	3.28	3.42	3.54	3.80	3.43	3.50	3.28			
Apparel & other textile prods.	3.78	3.22	3.40	3.61	2.74	2.84	3.43	3.68	2.72	2.84	2.82	3.05	2.92	
Lumber & wood products					3.08	3.27	3.98	4.76	3.14			3.25		
Furniture & fixtures					3.36	3.37	4.22	4.39	2.99		3.00			
Paper & allied products			4.19	3.81	4.77	4.51	4.72	4.97	5.21		4.86	4.35		
Printing & publishing	6.15	6.24	5.47	5.40	4.08	4.12	5.45	5.91	4.24		4.84	5.11	4.57	
Chemicals & allied products	5.79	6.56	5.16	5.34	4.46	4.28	5.06	5.46	4.88	4.26	5.05	5.52	5.83	5.89
Petroleum & coal							6.09	6.76						
Rubber & plastics NEC	4.79	4.46			3.74		4.42	4.78					2.94	
Leather products	4.28	4.28	2.78				3.15	3.59			2.56			
Stone, clay & glass products			5.34	5.25	3.91	3.81	4.99	5.08	4.08		3.80		4.52	5.60
Primary metals	5.51	5.45	6.80	6.83	4.09	4.01	6.30	6.13			4.97	6.09	6.75	
Febricated metal products	4.86	4.85	4.99	5.02	4.29		5.20	5.49	3.75		4.65	4.79	4.42	5.16
Machinery except electric			5.21	5.28	3.87	4.27	5.23	5.62	3.97	3.92	4.30		4.89	
Electrical equip. & supplies	6.27	6.31	4.23	4.54	3.83		4.87	4.74	3.39		4.02		4.66	
Transportation equipment			6.28	6.18	3.97		5.92	6.20					5.94	
Instruments							4.60	4.75	3.44					
Miscellaneous manuf'ing.							4.35							
Manufacturing	5.07	5.71	5.03	5.25	3.51	3.84	4.96	5.09	3.59	3.58	3.99	4.63	4.90	5.51
Durable goods	5.68	5.72	5.54	5.71	3.62	3.75	5.42	5.31	3.68	3.75	4.16	4.47	5.12	5.08
Nondurable goods	4.70	5.68	4.41	4.54	3.46	3.91	4.23	4.85	3.56	3.53	3.86	4.70	4.47	5.66

Source: U.S. Department of Labor, Bureau of Labor Statistics, Employment and Earnings, States and Areas 1939-75. Washington, D.C., 1977.

TABLE 7. Labor Climate

	DEL	MD	NC	PA	SC	VA	WV
1974 Labor union membership (000)	47	462	140	1695	82	247	218
% of non-ag. emp't	20.1	21.6	6.9	37.5	8.0	13.8	38.2
1974 Work stoppages	25	69	51	721	14	204	563
Workers involved (000)	15	36	18	293	5	88	197
Days idle during yr (000)	79	487	542	3945	161	1056	1598
State has right-to-work law			*		*	*	

Source: U.S. Bureau of the Census, Statistical Abstract of the United States, 1976.

F. Educational Levels and Opportunities. Educational achievement can be used as an indicator of labor quality and also of income levels, a market factor. Public education vocational programs are signals to industry that a community or state is interested in preparing its citizens for skilled employment. Although climate and other amenities are attracting highly skilled labor to formerly underdeveloped areas of the country (Management & Economics Research, Inc.), some of the older industrialized areas have maintained a historical advantage in highly trained personnel. These individuals not only contribute to the skilled labor pool in the areas in which they reside, but are also the innovators who create new industries and products.

In the mid-1970's, Delaware had 200 public and 58 non-public elementary and seconday schools, three public institutions of higher education and 4 private. 54.6% of all persons over twenty-five years of age had graduated from high school and only 0.9% were illiterate in 1970. The average salary for classroom teachers in 1976 was $12,500, precisely the national average. Delaware ranked seventh in the United States in average 1976 public school expenditures per pupil (in average daily attendance) with $1,606. Figured on a per capita basis, the average expenditure amounted to $367. 63,000 students were enrolled in vocational programs in 1974, 16,000 in office occupations training and 6,000 in trade and industry training. The state and local governments spent $9 million for such programs, which was added to a federal contribution of $1.6 million. In 1973 Delaware ranked 24th among the states in the number (2884) of doctoral scientists and engineers it counted as residents. It had by far the highest number of patents issued per 10,000 population in the study group in 1975 - 8.0.[15]

[15]Patents/10,000 were calculated using data from the Annual Report, Fiscal Year 1976, of the Commissioner of Patents and Trademarks, U.S. Department of Commerce, pp. 12-13.

Maryland had 1337 public schools (grades 1-12) in 1974 and 361 non-public schools. Slightly more than half of its 47 institutions of higher education were public, but they enrolled over five times as many students as the private colleges and universities. Of persons over age 25 in the state, 52.3% were high school graduates in 1970 and only 0.9% were illiterate. The average 1976 classroom teacher's salary was $13.700, well above the national average. Maryland ranked tenth in the U.S. in 1976 average expenditure per pupil and spent $456 per capita. In 1974, 230,000 students were enrolled in vocational programs on which $78,100,000 were spent $73.8 million state and local). Maryland also ranked tenth in the nation in 1973 for doctoral scientists and engineers, which totaled 8278. Maryland residents were issued 2.2 patents per 10,000 population in 1975.

North Carolina public schools numbered 2031 in 1974; non-public, 195. 210,000 students were enrolled at 56 public colleges and universities and 50,000 in 43 private institutions. 38.5% of the 1970 population over 25 years old had graduated from high school, and 1.8% were illiterate. The average classroom teacher's salary was $11,000, $1,500 below the national average. The state ranked 38th in the U.S. with an average per pupil expenditure of $1,099, representing a per capita expenditure of $282. North Carolina was the only state of the seven which had significant expenditures for summer schools, adult education, community services, and community colleges and technical institutes under local board of education control. 548,000 students were enrolled in vocational programs,

138,000 of whom were involved in training for trades and industry. The state and local governments spent $137,600,000 of the total $143.1 million expended for vocational program purposes in 1974. North Carolina had 5114 doctoral scientists and engineers in 1973, ranking 15th in the United States. One patent per 10,000 population was issued in North Carolina in 1975.

In the early 1970's Pennsylvania had 4320 public schools and 1484 non-public schools. Its private universities and colleges outnumbered the public institutions, 114 to 32, and enrolled a significant proportion of students, 183,000 versus 286,000, which is remarkable when one considers the fact that Pennsylvania State University alone had 65,500 students in 1973. In 1970, 50.2% of the residents over 25 were high school graduates and 1.0% were illiterate. The 1976 average teachers salary, $12,400, was only one hundred dollars less than the national average. The state spent $1660 per pupil in 1976, ranking fourth in the U.S., and $346 per capita. A total of 384,000 students were enrolled in vocational educational programs in 1974, 87,000 in office occupations training and 110,000 in trades and industry training, and the state and local outlays for such programs accounted for $161.2 million of the $183.1 million total expended in the state. Pennsylvania ranked third, behind California and New York, in doctoral scientists and engineers residing in the state in 1973. 3.0 patents per 10,000 population were issued to Pennsylvania residents in 1975.

South Carolina had 1190 public schools in 1974 and 158 non-public schools, 23 public institutions of higher education, and 24 private colleges and universities. 37.8% of the over-25 population had completed high school in 1970 and 2.3% of the state's population was illiterate. The average teacher's salary was low at $9,900 and the state ranked forty-fifth among the states in per pupil expenditure. 158,000 students were enrolled in vocational programs toward which the state and local governments contributed $44.2 million, the federal government $7.8 million. South Carolina's 1869 doctoral scientists and engineers ranked it 35th in the U.S. South Carolina residents were issued .9 patents per 10,000 population in 1975.

Virginia had 1791 public schools (elementary and secondary) in 1974 and 286 non-public schools. Slightly more than half of its 70 institutions of higher learning were public and they enrolled 213,000 students, compared with 29,000 enrolled by private institutions. Of persons over age 25 in 1970, 47.8% had graduated from high school, and 1.4% of the population was illiterate. The average 1976 classroom teacher's salary was $11,300, $1200 below the national average. Virginia ranked thirtieth in the U.S. in 1976 average expenditure per pupil and spent $291 on education per capita. In 1974, 401,000 students were enrolled in vocational programs on which $57.8 million were spent ($42.9 million by state and local governments). 95,000 of these students were involved in office occupations training, while 76,000 were being trained for trades and industry. Virginia's 5972 doctoral scientists and engineers ranked it twelfth in the nation. 1.3 Virginians per 10,000 population were issued patents in 1975.

In the mid-1970's, West Virginia had 1298 public and 58 non-public elementary and secondary schools, 15 public institutions of higher education and 10 private. 41.6% of all persons over 25 years of age had graduated from high school and 1.4% were illiterate in 1970. The average annual salary for classroom teachers in 1976 was $10,500, $2,000 lower than the national average. West Virginia ranked 44th in the U.S. in its average 1976 public school expenditure per pupil in average daily attendance, which was $1071. Figured on a per capita basis, the average expenditure amounted to $269. 75,000 students were enrolled in vocational programs in 1974, 20,000 in office occupations training and 18,000 in trade and industry training. The state and local governments spent $18.9 million for such programs, which was added to a federal contribution of $4.7 million. In 1973, West Virginia ranked 39th among the states in the number (1216) of doctoral scientists and engineers residing there. Only .8 patents per 10,000 population were issued to West Virginia residents in 1975.

The seven states varied significantly in the distribution of student enrollments between public and non-public elementary and secondary schools, an important indicator for corporate executives considering the comparative cost and quality of living in the states. Pennsylvania, Delaware, and Maryland had the highest non-public school enrollments; 18% of Pennsylvania's elementary students and 13% of its secondary students were enrolled in non-public schools, 12% of the elementary students and 10% of the secondary students in Delaware were in non-public schools, and 11% of the elementary students and 9% of the secondary students in Maryland were enrolled in non-public schools. In the remaining states, North Carolina had 2% and 1% respectively in non-public elementary and secondary schools, Virginia had 5% and 5%, South Carolina had 5% and 3%, and West Virginia

had 2% and 3%. An examination of religious affiliation in the states, however, reveals a concentration of Roman Catholics (25-40% of all church members) in Pennsylvania, Delaware and Maryland which explains much of the variance in non-public school enrollment. In fact, when the church-related non-public schools are separated out of the analyses, quite a different picture emerges:

TABLE 8.

PERCENTAGE DISTRIBUTION OF ENROLLMENT IN ELEMENTARY AND SECONDARY SCHOOLS

	Elementary (1 -8)			Secondary (9-12)		
		Non-public			Non-public	
	Public	Church Related	Non-church Related	Public	Church Related	Non-church Related
DEL	86.7	10.0	3.4	88.6	5.7	5.7
MD	87.0	10.4	2.7	88.0	7.2	4.8
NC	95.2	1.3	3.5	97.6	0.5	2.0
PA	80.4	17.7	1.8	83.7	12.6	3.7
SC	94.2	1.5	4.3	96.8	1.0	2.2
VA	92.5	2.9	4.6	94.9	1.7	3.4
WVA	95.4	2.9	1.7	95.8	2.5	1.7
US	81.1	9.7	2.2	90.2	6.8	3.0

Source: U.S. Department of Health, Education, and Welfare, Digest of Education Statistics 1976. Washington, D.C., 1977.

In the lower grades, it is the more southern states which have higher percentages of students enrolled in non-church related non-public schools. In the upper grades, however, Delaware and Maryland have

percentages well above the national average, possibly due to the proliferation of independent high schools in the context of the big-city school systems of Wilmington and Baltimore.[16]

Of the seven states, only Delaware exceeds the national average in the percentage of adults who are high school graduates. South Carolina has the lowest percentage of high school graduates, the highest illiteracy rate, and the lowest average teacher's salaries. Combined with the predominance of young people in the population age distribution noted in the preceeding section of this report, these findings suggest a possible constraint to South Carolina's continued development.

Delaware, Maryland, and Pennsylvania all spent more than the national average on education, whether figured on a per pupil or per capita basis, while the other four states fell to varying degrees below the national average. South Carolina was the lowest in both cases.

Vocational education is an important tool in preparing communities, particularly those whose population is characterized by low skill and educational levels, for development. In Delaware and North Carolina, enrollment in vocational programs was 49% and 47%, respectively, of total public elementary and secondary school enrollment.[17]

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16 Additional information for this section was gathered from The Statesman's Yearbook, ed. by John Paxton, St. Martin's Press, N.Y., 1976, and 1971 Catholic Almanac, ed. by Felician A. Foy, St. Anthony's Guild, Patterson, N.J., 1971.

17 In many cases vocational programs involve students who are not enrolled in school, thus these figures should not be interpreted to mean that the given percentage of total students are enrolled in vocational programs.

In Virginia, the percentage is 37%, in Maryland and South Carolina, 26% and 25% respectively; and in West Virginia and Pennsylvania, 19% and 17%. In Maryland, Delaware, and to a lesser extent, in Virginia and West Virginia, more vocational students are enrolled in office occupations training than in trade and industry training. In North Carolina, the reverse is true, the trade and industry programs having over three times as many students as the office occupations. In South Carolina, almost twice as many students follow trade and industry courses of study. There is a slight majority in Pennsylvania of trade and industry students. The state and local governments in North Carolina spend 9% of their total education budgets on vocational education. South Carolina spends 6%; Maryland, 5%; Delaware, Pennsylvania, and West Virginia, 3%. In the area of vocational training, then, it appears that North Carolina leads the states in budget commitment and in students enrolled.

Pennsylvania has by far the largest number of doctoral scientists and engineers and also institutions of higher education, giving it a theoretical competitive advantage in the attraction of research and development activities. Maryland and Virginia also rank high, no doubt due to their proximity to Washington, D.C. For a state which ranks low in literacy, high school graduates and public school expenditures, North Carolina ranks surprisingly high in doctoral scientists and engineers, due most probably to the concentration of universities in, and heavy promotion of, the Research Triangle area (Raleigh-Durham-Chapel Hill). The chemical industry has brought many scientists and engineers to Delaware, which as a result ranks high for its population size. South Carolina and West Virginia have comparatively few.

The overall educational environment looks best, as one would expect, in the northern, industrial states (Pennsylvania, Delaware, Maryland) of the region. Virginia has benefited from its closeness to Washington, D.C. Of the less industrialized states, North Carolina appears to be making the most progress toward educational preparedness for new development.

Table 9. Education

	# Public Schools 1974	Non-public Schools 1971	Higher educ. 1974		Enrollment, 1975 (000)					% high school grad. person 25+ years 1970	% illiterate 1970	1976 av. salary classroom teachers ($1,000)	Av. pub. school expend. per pupil in average daily attendance 1976		1976 Per capita school expend.	Vocational programs - 1974					Doctoral scientists & engineers - 1973	
			pub.	priv.	Elem. pub.	Elem. non-pub.	Second pub.	Second non-pub.	Higher pub.	Higher non-pub.				Amt.	Rank in U.S.		Total enrollm. (000)	enrollm. office occup. (000)	enrollm. trades & industry (000)	Total Expend. (mil $)	Federal	State & Local	Number	Rank in U.S.
DEL	200	58	3	4	86	12	43	5	27	5	54.6	0.9	12.5	$1606	7th	$367	63	16	6	10.5	1.6	9.0	2884	24th
MD	1337	361	25	22	611	77	276	28	176	29	52.3	0.9	13.7	$1516	10th	$356	230	65	24	78.1	4.3	73.8	8278	10th
NC	2031	195	56	43	805	20	364	5	210	50	38.5	1.8	11.0	$1099	38th	$282	548	43	138	154.1	16.5	137.6	5114	15th
PA	4320	1484	32	114	1484	330	777	120	286	183	50.2	1.0	12.4	$1660	4th	$346	384	87	110	183.1	21.9	161.2	13013	3rd
SC	1190	158	23	24	439	22	183	5	107	25	37.8	2.3	9.9	$1030	45th	$249	158	19	36	52.0	7.8	44.2	1869	35th
VA	1791	286	36	34	743	40	341	20	213	29	47.8	1.4	11.3	$1197	30th	$291	401	95	76	57.8	14.9	42.9	5972	12th
WVA	1298	58	15	10	278	7	123	4	68	11	41.6	1.4	10.5	$1071	44th	$269	75	20	18	23.6	4.7	18.9	1216	39th
U.S.											52.3	1.2	12.5	$1388		$314							

SOURCE: U.S. Bureau of the Census, Statistical Abstract of the United States: 1976. Washington, D.C., 1976.

G. Crime. Crime and the fear of crime are important aspects of quality of life. Of course the incidence of crime varies dramatically between intrastate locations, and also within communities, and many offenses are not reported, but one state in the study promotes itself as a low crime area, so a cursory examination was deemed worthwhile.

Table 10. Crime Rates by Type 1975

(Offenses known/100,000 population)

	Murder & non-neglig. manslaughter	Forcible Rape	Robbery	Aggravated Assault	Burglary or B&E	Larceny/ Theft	Motor Vehicle Theft
DEL	7.3	18.1	157.2	209	1826	3927	523
MD	10.7	31.5	344.2	323	1413	3268	517
NC	12.4	16.2	82.2	326	1285	1909	186
PA	6.8	17.4	168.6	136	983	1670	367
SC	14.7	26.5	110.9	359	1714	2156	260
VA	11.5	24.0	138.5	207	1166	2731	269
WVA	7.4	9.3	45.5	100	591	1229	126
US	9.6	26.3	218.2	227	1526	2805	469

Source: U.S. Bureau of the Census, Statistical Abstract of the U.S., 1976 (From FBI Uniform Crime Reports)

A ranking of states by crime rates does not look like any other ranking of the study states and thus does not appear to be explainable in terms of population, urbanization, or industrialization. West Virginia is clearly the lowest crime state, having less than half the national average rates in every offense category except murder. Pennsylvania ranks second, none of its rates exceeding the national rates. In Virginia, only the murder rate is greater than the national average and in North Carolina, murder and aggravated assault occur with greater frequency in the population than nationally. In Delaware, national rates are exceeded for burglary or breaking and entering, larceny/theft, and motor vehicle

theft and in South Carolina the rates are high for murder, forcible rape, aggravated assault, and burglary/B&E. Maryland presents the grimmest picture, however, having above-average crime rates in all but one of the seven index crime areas. Added to its more widespread reputation for political corruption, these findings point to a potential obstacle to successful image-building by the state of Maryland.

H. Political Environment.

The states studied vary greatly in political environment. Several are dominated by strong local governments, some have weak governors, others have a multitude of decentralized local units of governments. All these factors have serious implications for the types of economic development strategies which are workable. In Delaware, the political realm, as well as the social and economic, has traditionally been heavily influenced by the duPont family and corporation. As of January, 1977, a member of the family, Pierre S. duPont, is the new Republican governor of the state. Delaware is divided into three counties and has a relatively large number of local governments for its size, but power tends to be concentrated on the state level.

Maryland, on the other hand, has a strong tradition of local control, relatively few local governments, and a political system dominated by the Democratic party. The power in state government clearly rests with the executive branch, particularly in budget preparation.

Like Maryland, the significant unit of local government in North Carolina is the county, of which there are 100. The state political structure is dominated by the Legislature; Republican Governor James B. Hunt, Jr., who took office in January, 1977, has no veto power and cannot succeed himself.

Pennsylvania has the largest number of local (non-school district) governments for its population. Counties account for only 67 of the 4407 local units in this decentralized system. Governor Milton J. Shapp, a Democrat, is a former businessman and candidate for the U.S. Presidency.

South Carolina has a modest number of local governments and a state government dominated by the Legislature. The governor, Republican James B. Edwards, cannot succeed himself and occupies a very weak executive

office with no cabinet. Administrative agencies are established by and report directly to the Legislature. There are 46 counties.

Virginia is somewhat of an anomaly. It has fewer local governments for its population than even Maryland but its cities of at least 5000 residents may incorporate as independent units with taxing powers. There are 41 such independent cities and 95 counties. The governor may not succeed himself but holds a strong executive position. The present governor, Republican Mills E. Godwin, Jr., served a term eight years ago as a Democrat, after which the first Republican governor since Reconstruction was elected and then Godwin was re-elected.

In West Virginia, adopted state of new Democratic Governor John D. Rockefeller, IV, the governor may not serve more than one consecutive term. There are 55 counties in the state, which also has a relatively large number of local governments, but overall, government is quite centralized on the state level.

TABLE 11. Local Governments, 1976

	# local governments other than school districts	population per unit of local government
DELAWARE	133	4,353
MARYLAND	403	10,169
NORTH CAROLINA	802	6,797
PENNSYLVANIA	4,407	2,684
SOUTH CAROLINA	490	5,751
VIRGINIA	385	12,901
WEST VIRGINIA	453	3,980

Source: U.S. Bureau of the Census, Statistical Abstract of the United States 1976. Washington, D.C. 1976.

II. ECONOMIC DEVELOPMENT AGENCIES IN THE STATES: STRUCTURE, STAFF AND BUDGET*

A. Position of Agencies in State Government Structure. The organization of economic development functions within the state government structure takes many different forms. In Delaware and Maryland, economic development is combined with community development in a cabinet-level administrative agency headed by a Secretary. Both have Divisions of Economic Development whose directors report to the departmental Secretary, who is in turn responsible to the Governor. In both states the cabinet structure was adoped in 1970-1971 and the Department established at that time.

Virginia's Division of Industrial Development is located in the cabinet Department of Commerce and Resources for administrative and budgeting purposes, but the Division is considered part of the Governor's Office functionally and operationally. In West Virginia, a reorganizatition recommended by the new governor and approved by the Legislature went into effect on July 1, 1977, moving from a Department of Commerce, Industrial Development Division framework to a Governor's Office of Economic and Community Development.

In Pennsylvania, Economic Development and International Commerce are bureaus within a strongly centralized Department of Commerce. In May, 1977, North Carolina adopted a Department of Commerce approach. Between 1974 and 1977, Economic Development was a division in the North Carolina Department of Natural and Economic Resources, an agency responsible for both environmental protection and economic growth. Prior to 1974, the latter function was addressed by the Division of Commerce and Industry in the Department of Conservation and Development.

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*The remainder of this report is based, except where noted, on interviews with development agency officials in the seven states. The names and titles of the interviewees are part of the bibliography.

South Carolina presents a unique arrangement whereby economic development is undertaken by the Development Board, a 17-member non-professional board established by act of the Legislature, representing 16 judicial districts (the chairman is an at-large appointee). The governor appoints the Board members to staggered terms with the advice and consent of the Senate. State funds are appropriated for the Board's staff and program, it has policy-making authority within the constraints of the enactment legislation, and it reports to the Legislature.

It is interesting to note that upon election, most governors who have made economic development a campaign issue immediately proceed to reorganize the program. It is taken out of or put into a Department of Commerce, or otherwise moved about in the administrative structure. As this is a time-honored substitute for more substantive action, such reorganizations should be examined closely before using them as examples for recommended courses of action.

B. Relationships of Agency with Other State Government, Local Government and Private Sector Groups. In all seven states, the level of enthusiasm of the governor was felt to be a strong determinant of success, as he sets priorities and arbitrates in conflicts between various public purposes. Even in the states where the governors are constitutionally weak, their prestige and recognition value is deemed important, particularly when promoting outside the state's borders. The new governor of Delaware recently dramatized his commitment to economic development and rallied public support by holding a day-long open meeting at which citizens were invited to give him suggestions for projects which would expand job opportunities. A previous governor's commitment to environmental protection has given the state an anti-business reputation which the present governor is working to modify. In Maryland, after the establishment of the economic development agency by Governor Tawes fifteen years ago, leadership by the chief executive has been lacking. Aside from accompanying agency representatives on several trade missions to New York and Europe, the governors of Maryland have not been in the forefront of efforts to promote economic growth in the state.

North Carolina's governors have been more active. Despite constitutional weakness and an apathetic Legislature they have spearheaded a vigorous program. Governor Hunt, who took office in January, 1977, was elected on a platform which included a stepped-up economic development effort. He recently made a supplementary budget request which included $1 million for industrial development,[18] and the reorganization of the economic development function was at this initiative. The Legislature

[18] This request was approved by the Legislature later in 1977.

has been uninterested to date in economic development, however, and attempts by the agency and its supporters to remove the inventory tax have failed.

The Governor of Pennsylvania is an enthusiastic supporter of the effort who permits the use of his name, his office, and very often himself to further it. He was the active and visible leader of the Volkswagen promotion, and his office provided the coordination between the economic development, transportation and other agencies which was necessary to present an integrated and compelling program to the corporation.

The Governor of South Carolina not only hosts overseas trade missions and luncheons in New York, but frequently entertains prospects at the State House, occasionally overnight.

Virginia's economic development program began in the 1960's when a group of businessmen raised funds to hire an assistant to then-governor Harrison. Governor Godwin was elected for the first time on the basis of two major issues - community colleges and industrial development. The governor appoints the Industrial Development Division Director, who then has total access to the governor and generally can obtain whatever resources are needed for the Division. The governor is used sparingly for meetings with clients, more heavily for guidance in the resolution of problems.

Governor Rockefeller was elected in West Virginia after a campaign which focused on new jobs in the state. He has brought in a highly paid Director for the new Governor's Office of Economic and Community Development and plans to greatly increase the budget.

The development agency in North Carolina appears to have the most extensive network of local contacts. The umbrella Department has seven field offices, each of which includes at least one Division of Economic

Development representative. There are 50 to 60 county and metropolitan-based local development commissions which are funded locally, with some federal support; in each jurisdictions, the Division deals with commission members or with Chamber of Commerce industrial development staff, or power company employees or local county commissioners or mayors. This 20-25 year old network of enthusiastic and effective local representatives is felt to be the most important reason for North Carolina's success in matching prospects with appropriate sites. The Division representative assigned to a prospect refers that prospect to the local groups but remains with him throughout all dealings with state agencies. The field offices concentrate on helping communities to prepare for economic growth. An estimated 90% of major business relocations in the state come through the Division, which maintains a complete inventory of sites and buildings throughout the state using data from its field offices and local development representatives. The local representatives are responsible for "selling" the prospect on the location while the state representative remains to coordinate and address issues such as pollution control or other state policy matters.

Virginia also appears to have strong ties between the state and local development functions and personnel. There is an unwritten understanding among all organizations involved in economic development that the Division will be the major coordinating agency. Pennsylvania and Maryland seem to have the least state/local contact and cooperation. In Maryland, the state tends to service the prospects it generates and the local governments follow suit. The state agency provides some technical assistance to local governments, mostly to the more rural counties. There is no coordinated effort to involve all aspects of even state government in

economic planning and policy; a plan to effect such coordination failed to receive gubernatorial and cabinet approval during the Mandel administration. Pennsylvania has 10 regional field offices but has not developed close ties with other local development agencies.

An interesting approach was taken by the previous governor of Delaware, who established the State Economic Development Council which included representatives of each County's Economic Development Committee, the City of Wilmington, related state government agencies, and private business individuals. The Council meets once a month and reviews economic development activities in the state. The Division of Economic Development serves as staff to the Council, which has no authority over plans and programs. The Council has been in operation for one year and is considered a useful forum for exchanging information and may become more influential in the future. It may serve as an appropriate model for the smaller states.

All the state agencies claim to work with the utilities and Chambers of Commerce. Pennsylvania Electric appears to be heavily relied on in that state, and agency heads in Maryland and Delaware both expressed the need for better cooperation with their State Chambers of Commerce. Maryland cites a recent increase in cooperative involvement with organized labor and the State university. In Virginia, the Industrial Development Division actually performs a substantial amount of staff work for the State Chamber. In Delaware, Maryland and Pennsylvania, top-executive groups and their development subsidiaries represent opportunities which are not being fully exploited by the state development agencies. The Virginia Division of Industrial Development works closely with the railroads, which have sizable industrial development staffs.

Although all the representatives interviewed indicated that their agencies received cooperation from other state government units, it is clear that in the states which were underindustrialized in the early 1960's there is a great deal more unanimity of support for the economic development function through state government than in more developed states. The Carolinas are excellent examples. In the words of the deputy director of the S.C. Development Board,

> Fifteen years ago it became obvious that South Carolina was in a difficult situation; there was high unemployment and young people were leaving the state. A need for new job opportunities was generally recognized. If the attraction of new employers was to be successful, however, the human resources of the state had to have means of preparation--and found it in technical education, which became the partner of the Development Board. These facts of economic life also became political realities and legislators and governors began to run on platforms which included economic development, usually in terms of the constituents' quality of life.

The result, at least in South Carolina, is that when experts in other agencies are brought in from sister agencies to meet with prospects, they have been found to be sensitive to issues of confidentiality and timing, cooperative in attitude, and clearly partners in the effort to enhance the economy of the state. West Virginia also appears to enjoy similar inter-agency cooperation.

In North Carolina and Virginia, this sense of common purpose has been expressed in the inclusion of the Ports Authority in the Commerce agency which is also the umbrella for economic development. The director of the Ports Authority in Virginia was formerly an industrial development professional and has been very cooperative with the agency. The Division, the Ports Authority and the Department of Agriculture share an office in Brussels. In South Carolina, as previously stated, there is no cabinet

structure, but the Ports Authority and the Development Board cooperate closely and share an office in Brussels. The Bureau of International Commerce in Pennsylvania uses the state Ports Authority extensively for leads and support services as well as the U.S. Department of Commerce, ambassadorial offices and commercial attaches.

Clearly, when economic problems become sufficiently severe as to impact most citizens, mobilization of state-wide and state government-wide unity of purpose is less difficult. The challenge, as always, is the development of consensus about a developing problem and the priority it should be given.

C. Internal Structure. The Delaware Division of Economic Development has three sections. Industrial Development is organized on a county basis, with one man working in each county. Another individual deals exclusively with finance, primarily tax-exempt bonds. Economic Development has five professionals who administer federal Economic Development Administration monies. One professional is assigned to Tourism. The new director comments that four years is the longest tenure of any of the staff members and that he perceives a real problem in getting capable people to serve in state government.

The structure of the Maryland Division of Economic Development is listed in Table 12, which follows this section. Only North Carolina has a similarly diverse collection of functions included in the economic development agency. The Business and Industrial Development section includes five industrial development representatives who are assigned geographical regions in Maryland, one traveling outreach representative responsible for all of the United States and Canada, and one representative in a newly opened office in Brussels. This section also has plans to establish an internal research group to perform opportunity studies which would supplement the more general research performed by the Department's Research Division.

The North Carolina agency was made part of the Department of Commerce the day before the interview took place and future plans were understood to include the assignment of some of the functions listed in Table 12 to other agencies. There were at the time of the interview 11 industrial development (ID) representatives based in Raleigh and six in the field. There are also two ID representatives in the state's office in Dusseldorf,

West Germany and an individual on retainer in Toronto.

Pennsylvania's Bureau of Economic Development has 10 regional offices. The small regions have a single professional while metropolitan regional offices have substantial staffs. A five-man national plant location staff is charged with attracting new companies to the state but are not assigned to geographic areas as a basis for recruiting. The Bureau of International Commerce has a small, versatile staff which responds to demand in the division of resources between export promotion and reverse investment.

The South Carolina Development Board has six industrial development representatives domestically, one in Brussels, where an office is shared with the Ports Authority, and one in Canada. Economic Development Support includes a staff of geologists, planning and research, manpower resources, communications, financial resources, and existing industry coordination. There is also a community preparation section.

Virginia's nine industrial development representatives are assigned to geographic regions in the U.S. The Division considers itself fortunate to have had a very stable group of representatives over a relatively long period of time who have developed and maintained contacts with the real estate section managers of large firms and the corporate officers of smaller firms. The position of industrial site specialist was added two years ago to collect site, building, and community data to supplement in a formal way the familiarity of the industrial development representatives with opportunities in the state. The Research section, a director and assistant in the United States and a director and assistant in Brussels.

West Virginia's eight industrial representatives are each presently assigned a territory within the state, although plans were underway at the time of the interview to assign them geographical areas of responsibility in the United States. The Director and the research chief handle international business. It is expected that economic and marketing specialists will be added to the staff under the reorganization plan.

TABLE 12

STRUCTURE OF ECONOMIC DEVELOPMENT AGENCIES

Delaware Division of Economic Development
- Industrial Development
- Economic Development
- Tourism

Maryland Division of Economic Development
- Business and Industrial Development
- Tourism Development
- Ocean City Convention Hall Commission
- Minority Business Enterprise
- Seafood Marketing
- Administration

North Carolina Division of Economic Development
- Minority Business Enterprise
- Travel Development
- Technical Services
- Industrial Development
- International Development
- Food Industries
- Board of Science and Technology

Pennsylvania Bureau of Economic Development
- 10 regional offices
- National plant location

South Carolina Development Board
- Economic Development
  - Industrial Development
  - International Development
  - Industrial Parks Development
- Economic Development Support
  - Geology
  - Planning and Research
  - Manpower Resources
  - Communications
  - Financial Resources
  - Existing Industry Coordination
- Community Preparation
- Administration

TABLE 12 (Continued)
Structure of Economic Development Agencies

Virginia Division of Industrial Development
- Administration
- Community Development
- Industrial Development
- Public Relations and Advertising
- Research
- International

West Virginia Governor's Office of Economic and Community Development
- Economic Development
  - Industrial Development
  - Travel Development
  - Office of Minority Business Enterprise
- Community Development
  - Water and Sewer, Community Preparation, Housing
- Planning and Research

D. Staff: Number, Characteristics, Salary Ranges. Discussions with businessmen who have occasion to deal with development agencies make it clear that personnel quality is a key factor in agency effectiveness. Favorably viewed industrial development representatives are those of "board room" quality supported by responsive and efficient data resource staffs. The quality of economic development personnel is a reflection of the priority given the function by the governor and the legislature. Salaries are particularly important for the agency directors and industrial development representatives, who must be attracted from the ranks of successful industrial realtors, chamber of commerce development staffs, and other private sector positions. Agency staff characteristics are summarized in Table 13:

TABLE 13

ECONOMIC DEVELOPMENT AGENCY STAFF - 1977

state	Total # staff	# Professionals	Professional Salary range	Industrial Development Rep Salary Range
DE	19	12	$11,000 - $23,600	$11,800 - $23,600
MD	18*	13*	$12,000 - $22,000	$14,371 - $23,602
NC	90*	70*	$12,000 - $25,000	$20,000
PA BED	34	?	$ 8,000 - $25,000	$14,924 - $19,404
PA BIC	12	7	$11,000 - $26,000	
SC	71	45	$13,000 - $25,000	$13,288 - $25,599
VA	45	26	$14,000 - $38,000	$18,700 - $24,500
WV	17	8	$13,500 - $22,000 (new umbrella agency director - $55,000)	$13,500 - $22,000

*See text.

Source: Interviews

The Director of the development agency in Delaware is a retired DuPont executive placed in the job temporarily to help the new Governor. He believes the ideal permanent director would have a demonstrated track record in managing a small-to-medium-sized business, an appreciation for the financial realities of government, and an understanding of the basic business facts of life. Everyone below the director is a merit system employee.

The Secretary of the Department of Economic and Community Development in Maryland has 12 years of real estate, insurance, property management, and development experience in his background. He had also been the former Governor's administrative officer. Industrial development representatives do not have to be classified employees. 18 of the 65 employees in the division are involved in primary industrial development activities, of whom 13 are professionals.

North Carolina has the largest staff (145) of the states examined. However, 50-60 of these staff members are travel development personnel, many of whom man the Welcome Centers around the state. Its Director has been in the Division for twenty years and came to the agency from industry. The Pennsylvania Bureau of Economic Development's director has experience in finance, insurance, and real estate, coming from a vice presidency at the First Pennsylvania Bank. The director of the Bureau of International Commerce is a former member of the U.S. Foreign Service. Salaries are held down by the legislatively-set salary of the Secretary of the Department of Commerce.

South Carolina's director was formerly the agency director in North Carolina; his background includes industrial development, oil geology, and finance. South Carolina is unique in the technical nature of its staff.

Virginia's industrial development representatives appear to be the highest paid of the states examined in that the pay scale is shorter than other states, where it may take 10-15 years to achieve the top salary. The director comes from industry with sales experience and has also had prior experience in Chamber of Commerce work, business education, and industrial development.

The new director of the Governor's Office of Economic and Community Development in West Virginia has been an executive with the Pennsylvania Chamber of Commerce and with J. L. Hudson of Detroit. Others on the staff have backgrounds in public administration, business, journalism, and engineering.

E. Budget. The budget totals and breakdown presented in Table 15 are taken from the NASDA (National Association of State Development Agencies) 1977 Expenditure Survey, which relies on data submitted to it by the agencies. Use of this procedure for gathering information does not necessarily condemn the accuracy of the results (employment statistics used earlier, for example, were compiled by the Bureau of Labor Statistics from state reports), but rather suggests caution in using them. The greatest challenge to the data is not believability, but comparability. First, each of the agencies may interpret differently the categories into which they are asked to break down their budgets. It is clear, for example, that the interpretation of "industrial development" in Pennsylvania was a broad one which included many Department of Commerce activities. The primary booster to the total was the inclusion of four direct loans to business of an indeterminate but substantial amount. The Bureau of Economic Development, which is most comparable in function to the divisions examined in other states, has a current year budget of approximately one million dollars, or $.08 per capita. The Bureau of International Commerce's budget is listed in its entirety under "international trade promotion," although its responsibilities include to a significant extent the development of reverse foreign investment, which is clearly a basic industrial development function.

The second comparability problem is the result of the organizational context of the agencies being examined. Most are divisions of agencies which may include housing, community development, Ports Authorities, tourism and other activities. The total budgets for these parent agencies are listed in the first column of Table 14; only in Virginia and South Carolina are the economic development units independent of departmental

subordination and listed accordingly. Apart from these two cases, it is the department's budget which is distributed across the table; thus the research on which Maryland spent $298,991 may be serving not only the Business and Industrial Development section (whose total budget may be obtained by adding columns II, III, and VII) but also housing and community development functions of the Department of Economic and Community Development.

If the Pennsylvania data is adjusted to conform with the information received in the interview survey, and Delaware is assumed to have spent anywhere from half to all of the $300,000 total it had for industrial development (the remainder for tourism development), it becomes apparent that West Virginia is spending most per capita for economic development (total of "industrial development", "industrial development advertising", and "international trade promotion" from Table 14). It spends relatively little on advertising and international commerce development, however. The present director of the Division of Industrial Development predicts that resources for economic development may be more than quadrupled under the new Governor's Office of Economic and Community Development structure, a measure of the priority Governor Rockefeller gives this function.

West Virginia is followed closely by South Carolina, the other less-developed state in the study, which spent approximately 49 cents per person last year for economic development. Its international trade promotion budget was the smallest of any state with a foreign office, possibly attributable to the savings gained by sharing an office in Brussels with the Ports Authority. Virginia spent slightly more than half of South Carolina's budget, with a similar heavy emphasis on

advertising, and with no funds from outside sources. South Carolina and Virginia have the most liberal prospect entertainment policies. Delaware spent between $.26 and $.52 per capita without doing any outreach. North Carolina spent only $.17 per capita, Pennsylvania (adjusted), $.14, and Maryland, $.13. The Maryland total includes $92,610 for international trade promotion, of which at least one individual's salary was funded by the U.S. Department of Commerce and has not been renewed.

It is important to note that the per capita measure of economic development expenditure is useful primarily as an indicator of the priority given to the function within the framework of each state government's revenues and expenditures. A more populous state has more revenue and thus the per capita measure is a useful way of correcting the assessment of effort. However, the states compete for new business nationally and internationally as 50 relatively equal salesmen, regardless of population, and the total budgets they have at their disposal are indeed significant. Regardless of the size and population of the state, the advertising and outreach budgets, for example, determine the number of decision-makers who can be reached with the promotion message. In fact, the per capita expenditures for the smaller states may be somewhat overstated if one agrees that there is a certain base level of expenditure needed to operate any agency of government, regardless of function or program.

In terms of future trends in resources allocated for the purpose of economic development, West Virginia is the most optimistic. As noted, a supplementary budget request for economic development has been submitted by the new governor of North Carolina and approved. Delaware and Pennsylvania are experiencing severe budget difficulties state-wide;

however, the Division was not cut back as were other agencies in Delaware recently, indicating an awareness of the importance of its work. Maryland seems likely to continue at approximately the same level under the Acting Governor. South Carolina and Virginia do not foresee any decrease in the priority given economic development and expect resources allocated to decline only if national economic phenomena affect overall revenues realized by the states.

TABLE 14

DEVELOPMENT AGENCY BUDGETS - JULY 1, 1976 - JUNE 30, 1977

	I Dept. Total	II Ind. Dev. (excl. adv.)	III Ind. Dev. Adv.	IV Tourist Promo. (excl. adv.)	V Tourist Promo. Adv.	VI Research	VII Int'l. Tr. Promo.	VIII Tech. Svc. (State portion only)	IX Other Dept. Activ.	X Funds From Outside Sources	XI Indus. D Per Capi (II, III, VII)
DEL*	$ 700,000	$ 150,000-300,000	$ 25,000**	$	$ 25,000**	$	$	$ 350,000	$	$ 350,000	$.26-.52
MD	9,414,256	366,343	85,900	528,462	167,835	298,991	92,610	510,842***	7,363,273	1,978,898	.13
NC	4,702,000	510,000	180,000	1,030,000	430,000	176,000	257,000[t]	170,000	1,949,000	346,259	.17
A	26,542,000	16,410,000	200,000	6,308,000	255,000	1,665,000	483,000[t]	150,000	1,071,000	2,021,000	1.44[tt]
C	2,300,000	932,000	338,000	-	-	170,000	100,000[t]	150,000	610,000	75,000	.49
A	1,400,000	735,000	270,000	-	-	130,000	265,000[t]	-	-	-	.26
VA	3,743,126	898,465	116,000	352,600	157,865	20,000	6,000	-	2,192,196	412,944	.57

Source: Author's interview survey, not included in NASDA Survey
*$50,000 total advertising for tourism and industrial development
**local and regional development division
*** - includes a foreign office
t - adjusted to $.14; see text

ource: National Association of State Development Agencies (NASDA), State Economic Development Agency Expenditure Survey, Washington, D.C., September, 1977.

Finally, a note of explanation. "Funds from outside sources" are primarily U.S. Department of Commerce, Economic Development Administration (EDA) Section 302 monies. Under the Section 302 program, funds are distributed for financial, planning and technical assistance grants and loans for public works and development facilities necessary to enable private enterprise to expand and establish job-creating operations. Other (non-EDA) federal funds are used, in Maryland for example, for seafood marketing, minority business enterprise development, and international trade promotion. In North Carolina, NOAA (National Oceanic and Atmospheric Administration of the the Department of Commerce) funds are used in food industries development and NASA funds are received by the Board of Science and Technology. A summary of U.S. Department of Commerce grants for Fiscal 1976 is presented below:

TABLE 15

ECONOMIC DEVELOPMENT PROJECTS (federally funded) FISCAL 1976

(dollars in thousands)

	PUBLIC WORKS		BUSINESS DEVELOPMENT			TECHNICAL ASSISTANCE	
	No. of Proj.	Amount	No. of Proj.	Direct Loans	Guarantees	No. of Proj.	Amount
DELAWARE	0	$ 0	0	$ 0	$ 0	0	$ 0
MARYLAND	1	4,700	0	0	0	7	518
NORTH CAROLINA	11	8,828	2	884	0	10	224
PENNSYLVANIA	7	6,429	8	6,000	4,818	15	807
SOUTH CAROLINA	6	4,487	2	2,950	0	1	35
VIRGINIA	3	2,957	0	0	0	1	50
WEST VIRGINIA	2	842	1	0	7,200	4	63

Source: U.S. Department of Commerce, Toward Economic Progress: The Annual Report of the Secretary of Commerce for the Fiscal Year Ended June 30, 1976., Washington, D.C., 1976.

North Carolina and Pennsylvania appear to have availed themselves of federal aid to the greatest extent. Maryland had fewer projects but received significant amounts of aid. It did not, however, use federal funds for direct loans and loan guarantees to business, perhaps because of the MIDFA program available on the state level.

When federal economic development funds are looked at cumulatively (see Table 16), however, the targeted nature of EDA programs becomes apparent. Its primary mission is to aid in creating jobs and increasing incomes in economically lagging areas.[19] West Virginia has, as a result, received the larget amount of EDA aid per capita over time, more than twice as much as South Carolina, the second highest of the seven states. South Carolina is followed by North Carolina, Delaware, and Pennsylvania. Maryland and Virginia received the lowest amounts of aid per capita.

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[19] U.S. Department of Commerce, Annual Report of the Secretary of Commerce. Washington, D.C., 1975, p. 23.

TABLE 16

CUMULATIVE ECONOMIC DEVELOPMENT PROJECTS (federally funded) THROUGH FISCAL YEAR 1975
(dollars in thousands)

	PUBLIC WORKS		BUSINESS DEVELOPMENT			TECHNICAL ASSISTANCE		PLANNING GRANTS		STATE TOTAL		
	No. of Proj.	Amount	No. of Proj.	Loans	Working Capital	No. of Proj.	Amount	No. of Proj.	Amount	No. of Proj.	Amount	Amt/capita
DEL	9	$ 5,196	1	$ 738	$ 0	4	$ 104	2	$ 135	16	$ 6,172	$.010
MD	13	6,738	5	5,052	180	23	2,337	8	607	49	14,764	.004
NC	102	52,103	13	8,536	293	35	1,161	36	1,575	186	63,376	.012
PA	110	57,494	11	11,934	585	167	9,458	37	2,116	325	81,001	.007
SC	95	38,659	13	11,164	1,148	18	664	33	1,458	159	51,944	.018
VA	32	15,192	6	2,640	2,698	24	1,469	30	1,482	92	20,783	.004
WVA	121	69,432	12	5,667	955	52	782	15	675	200	76,556	.042

Source: U.S. Department of Commerce, Annual Report of the Secretary of Commerce, Washington, D.C., 1975.

Another source of federal aid of which Maryland has not adequately availed itself is the Regional Action Planning Commission program of the Economic Development Administration (EDA) of the U.S. Department of Commerce. Until last year, Maryland was not part of any existing or proposed multi-state regional commission, through which federal funds are channeled to states. It has recently joined a proposed Middle Atlantic Commission, which has not yet been approved or funded by EDA. During 1976 Congress acted to encourage the creation of new commissions[20] and Commerce is presently reviewing their effectiveness.[21]

Seven such commissions existed in 1976. Of particular interest is the Coastal Plains Regional Commission, which includes the coastal portions of Virginia, North Carolina, South Carolina, Georgia, and Florida. The Virginia and Florida portions were added in 1975 to the region which was established in 1967. The Commission received $8.2 million in fiscal 1975 and $9.8 million in fiscal 1976. An evaluation by an independent consultant gave the Commission, since its inception, at least partial credit for: (a) 7,253 new or saved jobs; (b) 26,538 students placed in jobs after training in educational facilities funded in part by the Commission;[22] (c) $227 million of private investment in new facilities.

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[20] U.S. Department of Commerce, Annual Report of the Secretary of Commerce, 1976, p. 60-61.

[21] Frederick Ricci, Director, Office of State and Local Assistance, Department of Commerce.

[22] U.S. Department of Commerce, Annual Report of the Secretary, 1975, p. 29.

Working with the State development agencies, the Commission has been engaged in programs to expand regional exports to foreign markets, to plan seafood industrial parks, to establish aviation service needed to attract industry, and to analyze the economic and environmental feasibility of deep water oil ports and refinery sites.[23]

Other federal aid available is discussed in Section III.E.

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[23] U.S. Department of Commerce, Annual Report of the Secretary, 1976, 1975, 1974.

III. ECONOMIC DEVELOPMENT AGENCIES IN THE STATES: PROGRAM

A. Development Philosophy. Although the legislature, which is the strong branch in Delaware government, appears to be favorably disposed toward economic development generally, response to local interests and leadership of a former governor have resulted in an anti-business posture, embodied particularly in the Coastal Zone Act which prohibits all but light manufacturing in a two-mile zone around the coast. Deep water ports have been prohibited within the state boundaries. Personal income taxes are high and the state budget is unbalanced. Accordingly, the development agency has taken the position that it must address some of these negative characteristics within the state. It is felt that the business climate must be improved in order to have something to sell in an outreach program. State and federal funds are being applied for this purpose and the new governor is seeking to heighten public awareness regarding the importance of economic growth. Tourism is one of the leading sources of income for the state's residents, particularly in the Rehoboth/Lewes area, and its needs must be balanced against those of other industries.

The goals of the program in Maryland are to retain existing business, attract new economic activity, and improve the business climate in the state. It solicits not only new manufacturing activity, but also corporate headquarters, regional offices and research and development facilities. Tourism does not play a large role in the state's economy and its promotion is largely supported through matching grants with local governments and limited state advertising.

The North Carolina effort is focused on industrial development, with little emphasis placed on office space users. The Research Triangle area

is an important exception to this general philosophy, and a vigorous campaign has been mounted to attract research and development firms there. Federal government research and development activities form an important nucleus for the Triangle. At the time of the interview, travel development was closely related to industrial development in the agency structure, as tourism is a major economic generator which provided an estimated $1 billion in impact last year.

The Bureau of Economic Development in Pennsylvania is charged with attracting new business and retaining existing business. It has historically emphasized industrial development, but the laws governing the agency and its programs have recently been changed to include commercial development. The Bureau of International Commerce (BIC) promotes the export of Pennsylvania goods and services and encourages and facilitates capital investment in the state by foreign-owned firms. BIC includes all aspects of foreign trade and all types of foreign investors in its definition of economic development.

South Carolina's leaders perceive underutilized people, not the unemployed, to be the state's major problem. Their program is cocentrated on providing better job opportunities for the states' citizens, bth higher paying blue collar jobs and more white collar jobs. The focus ison economic development in the total sense, including research and dvelopment facilities, new corporate and regional offices. Tourism is considered to be very important to the state's economy and is reflected in te close relationship of the Development Board with the Department of Park, Recreation, and Tourism. Some of the manpower training technicalcenters are geared up to satisfy tourism labor requirements along the coat of the state.

The definition of industrial development in Virginia includes corporate headquarters and regional offices, wholesaling, distribution, and research and development. It is not concerned directly with retail development or tourism, although information is provided on request. Tourism accounts for only 3-3½% of the employment in Virginia. High wage labor opportunities are not a stated priority.

In West Virginia, the emphasis is on industrial development in the strict smokestack sense. In response to the net outmigration of population experienced in the 1950's and 1960's, job creation is a priority. Tourism is the third largest industry, after coal and chemicals, but it is concentrated in areas along the eastern border and panhandle that are largely unsuited for industrial construction.

B. Research functions. Most of the research in Delaware is done by the Economic Development section as part of the EDA-funded planning, which tends to be focused on developing data gathering and community profiles and site inventories. Site data is fed to the Division by local groups; it does not conduct surveys of its own. Facts and figures highlighting the state's advantages are also compiled.

The research division in Maryland's DECD serves the entire department and is composed of professional economists, econometricians and statisticians who publish an annual report on the economy of the state; conduct studies on economic issues which develop in the legislature and the executive branch, i.e., non-returnable bottle tax, corporate income tax structure; develop indices of state economic output; and perform contract research for federal agencies. Client-specific research is done on request from BID (Business and Industrial Development section). The Local and Regional Development (LaRD) Division uses EDA 302 funds for planning, including contracting for feasibility studies, which are not done by the Research Division. For example, $75,000 of EDA money and $25,000 of state funds have been committed to a feasibility study for a deep water port and related industrial development at Crisfield, Maryland. BID agents maintain their own inventories of available sites and buildings and the Division hopes to establish its own research office to conduct feasibility studies.

Little general research is done in North Carolina apart from establishment and maintenance of the Data File.of information regarding the state and its citizens. Client-specific research is done in response to specific questions on energy, freight rates, manpower, etc.

A separate unit in the Pennsylvania Department of Commerce gathers data and performs statistical analysis. Client-specific research is referred to others by the Bureau of Economic Development.

The South Carolina agency staff claims a manpower research capability which is the envy of all; they are able to completely forecast the ability of any of the state's regions to staff a facility, including prediction of the selection ratio (applicants/jobs). A computerized file of sites is compiled and maintained by the state agency using questionnaires to local development people and property-owners. Data is also maintained on communities and available buildings. There are geologists on the Development Board staff who perform site research, i.e., soils analysis. Client-specific research is also done; for example, market studies are performed at client request and at the agency's own initiation.

The research division in Virginia prepares annual reports on Virginia facts and figures and the Virginia economy. Four or five cost and feasibility studies for various industries are carried out each year using a hypothetical firm in the industry and comparing its costs of start-up and operation in Virginia with other competitive sites outside the state. The Division also does continuing basic economic research, such as energy models of the state economy, commuting patterns, etc., which are published in the Economic Review, an occasional publication of the Division. Staff economists are also encouraged to keep up with and publish in professional journals. Client-specific research may be requested by the ID (industrial development) representatives, but they are solely responsible for the custom-tailored data file materials given to clients.

West Virginia carries out client-requested research either in-house or refers it to other relevant state agencies. Its research section collects information on available sites and buildings. Agency staff has done comparative studies of West Virginia and its competitor states on taxes, labor, environmental control, and natural resources. It has not yet done feasibility studies for specific types of industries but will have the capability to do so under the reorganization plan.

C. Existing Business and State/Local Division of Function. The new director of Economic Development in Delaware plans to intensify the efforts of the county-assigned ID specialists to work with existing and expanding business. Most of the Division's leads on prospects coming into the state, however, are generated and serviced by others at the local level; the Division primarily assists in trying to meet their needs.

The two staff members of the Office of Business Liaison in Maryland concentrate on existing business needs. MIDFA, the Maryland Industrial Development Financing Authority is the primary program for existing business. 50% of its loan guarantees go to expanding businesses within the state. The site location network in Maryland is highly decentralized and the local governments tend to have the responsibility for preparing their communities for economic growth and to control the attraction and placement of industry within their boundaries. At least four subdivisions of the state, Baltimore City, Baltimore County, Prince George's County, and the Baltimore SMSA, have or will have vigorous economic development outreach campaigns of their own. The state agency is contacted first by a district minority of prospects who are interested in Maryland locations. When it does service a prospect, the agency sends out its requirements to all the localities, who are invited to respond. Responses are given to the prospect, who makes the decision about what he wants to see. The state agency plans to try to improve its relationship with local economic development staffs in the coming year.

As mentioned earlier, 90% of new major business relocations into North Carolina come through the state agency. The seven field offices have existing business preservation and development as their primary

role and do not do very much site location work unless the local communities are not well organized. The state directs prospects to sites based 80% on assessment of client needs and 20% on the need of localities for economic activity and the overall good of the state.

The regional offices of the Pennsylvania Bureau of Economic Development handle existing businesses' needs. The Secretary of Commerce has also appointed a Business Ombudsman as a central and visible commitment to existing business. Because of the substantial industrial base in the state, as much as 75% of all new jobs are related to the expansion of existing industry. Site inventory and community information is fed from the regional offices to the central office; in a relatively small new business investment, the region is responsible for site selection, whereas in larger deals, the central national plant location staff and the regional representatives work together. The referral process for leads on prospects is decentralized. The Bureau of Economic Development takes over International Commerce clients at the site selection stage.

In South Carolina, 50% of new investment is in the expansion of existing industries, either at the same site or through establishment of second or third plants within the state. An individual in the Economic Development Support section is charged with the responsibility for maintaining existing industries. The Development Board staff tries to involve local development people when prospects visit sites, but timing sometimes makes this impossible. However, these local representatives are deemed essential, for it is impossible for the state staff to know every community well enough to sell it. South Carolina has 250 incorporated towns and cities, but only 10 have more than 15,000 population. Dispersal of economic activity throughout the state is an articulated goal. The GREAT Town Program (Governor's Rural Economic Achievement Trophy) awards trophies to

communities with populations of less than 15,000 which have prepared themselves for economic growth with the aid of professional staff from the state who explain the program and provide counsel and assistance in establishment of an industrial development corporation, beautificaiton, brochure preparation, compilation of site data, etc. GREAT towns are placed on a priority list for visits by industrial prospects. A separate task force makes recommendations and the Development Board decides the award recipients, who are presented their trophies by the governor. In referring leads to the localities, the state considers the clients' needs and objectives first and most heavily (if not erroneously preconceived) and only then the benefit to the state of a particular area or specific location.

Fifty per cent of the recent manufacturing growth in Virginia has been in expansion. The community development director of the Division visits existing industry full time. If expansion is to take place at a separate location, the project is assigned to an industrial development representative. The local community, site and building information collected by the state industrial site specialist is not computerized; it is felt that no coding system can be sensitive enough to variable client needs and desires. The personal approach is preferred, and until two years ago the ID representatives maintained their own inventories. The success to date of this approach is based on the existence of a stable pool of ID representatives who have been able to build up over time a great body of personal knowledge about available sites and buildings in the state. The primary concern is to find a site which fits the clients' specifications but there is, however, an understanding among the representatives about certain areas which need growth, and

suitable sites in these areas are usually included in presentations to clients. The community development staff works with local planners to prepare the communities for industrial development, including the collection of site information, creation of development corporations and financing organizations, and the reservation of appropriate land, not just leftover space, for industry. If communities are anti-growth, the Division simply bypasses them when compiling available sites for clients.

Field representatives in West Virginia are asked to contact existing industry on a regular basis and to encourage business executives to come to the agency with problems. The referral process is quite centralized; new prospects generally approach the state agency first, as they need a working relationship with state government in order to best effect a relocation.

Delaware, Maryland and Pennsylvania appear to have the most highly decentralized systems of prospect referral and service. In the southern states, regardless of numbers of local governments, the state agency is the clear focus for economic development activity. There are few large cities or significant metropolitan areas in these states with the political will and resources needed to mount their own promotion efforts.

Commitment to the retention and expansion of existing business, as evidenced by functional structure, seems strongest in North Carolina and Pennsylvania, which have field offices for this purpose. Pennsylvania's advertised Ombudsman adds strength to this commitment. Delaware's ID specialists concentrate on this function, having no outreach responsibilities. Maryland, South Carolina, and Virginia have one or two individuals assigned specific and full-time responsibility for this

task. In West Virginia the ID representatives charged with attracting new business are also asked to support existing companies, a work overload which may be remedied by the expected increase in the Division's budget.

D. Marketing, Promotion, and Salesmanship Strategies. The economic development agency in Delaware engaged a research organization two years ago to identify target industries, but the results have not been found to be very helpful. $150,000 were spent for the target study, invitations signed by the governor, preparation of elaborate brochures, and banquets and conferences in various U.S. cities.

The agency is now relying on leads from inquires, to which it responds with specific responses to questions and other materials of general interest. Prospects are invited to visit the state and are shown appropriate sites. The division offers to provide assistance in the details of relocation, including financial assistance. Delaware has no unifying concept in its marketing effort and the acting director expressed a need for more sophistication in compiling fact brochures. Corporate executives of existing Delaware companies have not been used in the past, but the new administration intends to do so. As indicated earlier, the focus in the state is on improvement of the business climate before concentrated attempts to promote it are made.

Maryland's Division of Economic Development has had one "opportunity" study done in the past for the printing industry and has received budget approval for four more. These will be used as targeting tools. There is one ID representative, recently hired, who travels around the United States and Canada making calls on selected businesses. If a prospect responds to initial contact, either by the outreach representative or a reply to an inquiry, an in-state ID agent is assigned to aid in site selection. The assigned agent tries to contact local development officials to alert them to prospects but is not always able to do so. There is no air transportation at the disposal of the agents; they lease cars and air-

planes when needed. Wining and dining of prospects is very limited. The agents are permitted $12.00 per day for meals and are reimbursed for their lodgings; the Secretary's promotional expense account covers a little more, but no liquor or lavish entertainment. There are insufficient funds for a marketing campaign, and little is spent on advertising. The Secretary plans to involve corporate executives more extensively in the promotion of the state by working with the State Chamber of Commerce's Development Committee.

North Carolina conducted a study in 1974 to determine where the state stood and what industrial development strategy might be appropriate. An input-output model of the state's economy was used to identify sectors of activity in which growth would aid the overall economic situation. From a 70-sector matrix of high-medium-low growth and high-medium-low wage industries, 14 target industries were developed. Most of these were in five SIC classifications in the 30's; i.e., metal fabrication, transportion equipment, technical instruments, etc. The issue became politicized and work on the 14 was begun only in 1977. A report on the electronics industry was completed and one on fabricated metals underway at the time of the interview; these reports look at directions within the industry and at specific companies. Companies which appear to be potential movers are sent targeted direct mailings and may be visited in a Mission call, wherein several ID representatives and sometimes private sector individuals from the particular industry call on prospects. Travel and entertainment allowances are $35/day out of state and $23/day within the state. Corporate executives are often used, particularly in foreign missions.

Outreach by the North Carolina agency generally tends to be on a controlled-call basis, although special events, like the appearance of the North Carolina Symphony at Carnegie Hall in April, 1977, are occasionally exploited, as this event was, by a luncheon and cocktail party given by the governor for New York industrial leaders. The governor made himself available for private consultation throughout the affair and in his suite afterwards. Advertisements are run regularly in Business Week, Fortune, Forbes, etc. with no single message or image; various ads highlight fiscal responsibility, available buildings, manpower and other advantages. Two state planes and a state helicopter are at the disposal of the ID representatives but are rarely used because of red tape. The helicopter is used when an important client has limited time and potential sites are considerable distances apart, which frequently happens in this 500-mile wide state. An example of the type of special program the No-th Carolina agency can develop was the case of The Data General Corporation move from Massachusetts. The state aided the corporation's management in encouraging its employees to relocate by hosting a dinner in Massachusetts to which all employees were invited. Industrial development representatives, the president of the school board of the community to which Data General was moving, and the president of a nearby university all answered questions about moving to North Carolina raised by the employees.

The national plant location staff of the Bureau of Economic Development in Pennsylvania use primarily controlled calls on prospects on which they have received leads. Banquet tours have proven only partially succssful and are not used often. Airplanes, both chartered and state-owned, are available but not used extensively. The national relocation representatives

are assigned to serious prospects, for whom they provide access to other governmental units and guidance in site visits. The Bureau of International Commerce director commented that the state government had been remiss in the area of targeting, although local communities have been encouraged to develop a focused approach and to build a case for their strengths in particular sectors. The current state marketing campaign is organized around the slogan, "Pennsylvania for Business. Because Business Means Jobs," and a new advertising program was being developed at the time of the interview. Corporate executives are not used much.

Target studies have been used in South Carolina to look at the state's advantages and drawbacks, the types of industries which are in growth situations, and, of those, the ones to which the state can offer an attractive package. Specific companies are targeted, including high technology and commercial operations, regional and corporate offices. The advertising program is designed with these target audiences in mind, and is part of a coordinated approach which includes direct mail and trade missions. Each campaign has a central theme, and tries to reflect business conditions as well. Follow-up research is conducted on ad impact, media choice, etc. A rifle shot approach is taken to calling on prospects: research is used to target the specific firms to be visited, call sheets are developed, and, where there are sufficient concentrations of prospects, a trade mission is assembled, which includes, depending on the target, bankers, local development officials, members of the Development Board, the governor, legislators, and Port Authority executives, along with the staff. Other business leaders accompany trade missions infrequently. Regular missions are taken to major U.S. cities, i.e.,

New York, Chicago. The Board owns a Jet Commander fully equipped for audiovisual presentation which it sends to pick up clients or to take Board personnel to the clients to make a presentation. The offices of the Board in the Banker's Trust Tower are similarly well-appointed, projecting a corporate rather than governmental image, and filled with sophisticated presentation equipment. Appointments to see local corporate executives are made for relocating industrialists who have almost definitely settled on the state, but are looking at several sites; the Development Board staff does not attend these meetings. Outreach employees are given subsistence allowances and are reimbursed for entertainment expenses.

The cost and feasibility studies described in Section III.B are used in Virginia to target industries for the state. The target industries are chosen from among those which are growing nationally, which have something to offer Virginia, and to which Virginia may seem attractive. A slogan, "Profit from the Vigor of Virginia," is used in all advertising materials. The advertising campaign has nine parts, each highlighting different site selection advantages. No coupons are used, so there is no accurate measurement of return on advertising investment. The goal of the advertising program is to convince the industrialist reader that Virginia can meet all his needs. The state's image also benefits from aggressive tourism advertising.

Controlled calls on targeted prospects are generally used. Missions are not being taken to New York and Chicago very often anymore, as they have not proven to be worth the time and expense. The exception is the participation by the Division in the State Chamber of Commerce's annual report to top management in New York, which is also attended by the governor. In the virtual absence of these elaborate group visits, the

ID representatives are depended on to develop contacts with corporate real estate section people and executives in the U.S. region to which they are assigned. As the present representatives move toward retirement age, however, the Virginia officials admit that the strategy may need to be altered to take into account the newer representatives' inexperience and lack of an extensive network of contacts.

The Division of Aeronautics, the State Highway Department, and the Governor's Office each have two planes. The Division has priority after the governor on the largest plane, and it is used whenever time is a constraint. When trade missions are assembled, corporate executives are invited to participate. Also, the Division has an eleven-member Advisory Committee of business executives, which is headed by the chairman of VEPCO. If it seems appropriate, or if a client requests it, meetings with Virginia corporate executives in a prospect's industry are arranged. When information from the state agencies is needed for a client, generally it is collected by the ID representative and presented personally to the prospect. The exceptions are in the cases of the water and air resources boards, in which it has been found to be preferable to let the technical experts at these boards and in the client's company work together directly. ID representatives have no set entertainment allowances, but rather are reimbursed for the amount spent.

West Virginia has obtained Dun and Bradstreet and Fantus mailing lists for selected sectors which it uses to target prospects which would be compatible with the state's needs and what it has to offer. "Blitz trips" are taken to target areas, primarily those in the northeast and midwest which are north of West Virginia, including New York, Chicago,

Detroit, Houston, California, Pittsburgh, and Baltimore. Prospects are sent letters advising them of the dates on which the group from the agency will be in town and if they desire to talk about expansion plans and West Virginia's advantages. If no response is forthcoming, the company is not contacted. Cold calls are occasionally made in these cities. Corporate executives are not routinely used for these trips. The new government plans to accompany the ID representatives often in the future, but banquet tours, i.e., Governor's luncheons in New York, have not been found to be productive, and will not be part of the regular program.

State airplanes and helicopters are at the disposal of the division, which is charged for their use, and the agency has found that it is less costly to contract privately for aircraft, which are used frequently. Several utility companies also have helicopters which the division uses. The agency is the only one in the state which is permitted to entertain, but officially may not include alcohol. ID representatives are limited to $9/day in-state and $15/day out-of-state for their own meals, and $30 and $45 per diem. The marketing effort includes direct mail both nationally and internationally, as well as advertisements in national-circulation periodicals. The state is now concentrating on an energy theme, "Energy Capital of the U.S.," in all promotion. Advertising promoting the tourism of the state aids in the projection of a favorable image.

There is a clear division in marketing philosophy between the states, in that Delaware, Virginia, Pennsylvania, and West Virginia have found banquet tours, governor's receptions, and elaborate trade missions to be of considerably less worth than the cost. Virginia in particular

is being developed in Latin America. Pennsylvania is third in the nation in number of foreign-owned businesses operating in the state.[24]

South Carolina ranks fourth in foreign-owned businesses, though it spends only a quarter of the amount Pennsylvania has committed and less than either North Carolina or Virginia. It has the largest French investment outside France and the largest West German investment in the U.S. The Development Board shares an office with the Ports Authority in Brussels, uses the ports representatives in Hong Kong to aid in trade missions, and shares the Ports representative in Tokyo. South Carolina was one of the first states to organize trade missions to foreign countries. Last year, a Far East mission to Korea, Singapore, Taiwan, Hong Kong, and Japan was combined with the opening of the Ports Authority's Hong Kong office and was hosted by the governor. Missions to Europe and Canada have taken place in 1977. The Piedmont Textile Belt, to which the New England textile industry moved, now attracts Swiss and German affiliated industries, i.e., textile machinery, synthetic fibers. The concentration of foreign firms at Spartanburg happened more by accident than by design, according to agency officials, as the success of a few foreign companies relocated there led to a steady migration. A foreign trade zone outside Charleston is promoted strongly to foreign manufacturers who wish only to assemble goods until their markets in the U.S. are sufficiently strong to allow construction of a manufacturing plant.

The Virginia Division of Industrial Development shares a Brussels office with the Ports Authority and the Department of Agriculture. The

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24 U.S. Department of Commerce, Foreign Direct Investment in the United States, Vol. 3: Appendix A, pp. A-128-A-129, April, 1976.

Ports Authority also has offices in Tokyo and Sao Paulo, with which the industrial development staff coordinates closely. The international section also has two professionals in Richmond. Once a project is generated in Europe or elsewhere, it is assigned to a domestic ID representative. One of the representatives tends to specialize in foreign firms, although he continues to work his assigned U.S. geographic region as well. The director of the European office generally makes the presentation to the client on the sites deemed suitable by the domestic staff. A free trade zone at Portsmouth is being promoted heavily and a subzone has been approved at the Chesapeake Volvo facility.

North Carolina has an office in Dusseldorf, West Germany, staffed by two industrial development representatives and a trilingual secretary. An individual in Toronto is on retainer to the state, but concentrates primarily on travel development. Corporate executives, particularly those with contacts abroad, who do business with foreign firms, or are in the same industry as the prospect, are often taken on foreign trade missions. Usually at least one banker accompanies such groups. Heaviest activity recently has been from Canada.

Maryland's Brussels office was opened in January 1977. The Maryland Port Administration (MPA) foreign representatives have been helpful in providing introductions for the ID representative and have provided excellent cooperation, although their primary concern continues to be tonnage. It is felt by the Secretary that the present MPA foreign offices could be made more productive from an economic development point of view, but this would require a major change in MPA philosophy.

Delaware and West Virginia have no foreign offices. Delaware, however, has the largest number of foreign-owned plants as a percentage of plants with 20 or more employees east of the Mississippi River.[25] To date, the director and the research chief in West Virginia have taken responsibility for reverse investment, in which the director considers the state to be relatively weak. He has recommended a feasibility study for a Brussels or Dusseldorf office or a contract arrangement with a professional to represent the state. The new chief of the umbrella agency into which the division was in the process of being placed was in Germany at the time of the interview. Much of the recent foreign activity in West Virginia has been from Canada and Germany. Volkswagen recently purchased the American Motors Company plant in Charleston to stamp bodies for the New Stanton, Pennsylvania, operation and to make bodies for AMC. Three individuals from the agency visited Montreal in December, 1976, to talk to interested businesses, particularly those from Quebec province.

The Domestic and International Business Administration of the U.S. Department of Commerce has 43 decentralized district offices throughout the country, including one in Baltimore, which offer export promotion assistance to businesses through trade centers, trade fairs, U.S. trade missions, catalog shows, technical seminars and other techniques and provide no cost counselling. The availability of such services, provided by the federal government, can significantly augment the development agency's ability to serve existing business, but was mentioned as part of the state program only in Pennsylvania.

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25 Ibid.

F. Financial Assistance Programs. (Information in this section, except where noted, is from the special report on the states published annually in Industrial Development magazine.[26])

Table 17 shows the financial assistance programs available to industry in each state. Delaware's programs are all on the state level. It is the only state of the seven in which state general obligation bonds can be used to aid industry financing. Delaware and Maryland are the only two of the states with loan guarantee programs. The Maryland Industrial Development Finance Authority (MIDFA) insured 61 loans between 1965 and 1977, for a total of $39,210,713. Maryland's Industrial Land Act also enables the state to sell bonds for local jurisdictions' acquisition and development of industrial land and shell buildings. Maryland presents the counterpoint to the Delaware case, as would be expected in a locally dominated state: revenue bonds and general obligation bonds are issued by city and county governments and the state has a program for matching city and county industrial development financing funds. Only West Virginia, of the other six states, has the latter program.

In fact, West Virginia has the greatest variety of financial assistance programs of the seven states. The Economic Development Authority provides low interest loans to new or expanding businesses for up to 50% of the cost of the project.[27] Only Pennsylvania and Delaware make similar direct loans to business for building construction, and only Delaware and West Virginia provide funds for equipment and machinery as well. West Virginia is unique in having local governments which make such loans.

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[26] The official publication of the Industrial Development Research Council, a non-profit organization of corporate real estate executives and facilities planners devoted to professional advancement. Conway Research, Inc., Atlanta, Georgia, November/December, 1976.

[27] Information received in interview with agency personnel, henceforth marked *.

TABLE 17

FINANCIAL ASSISTANCE PROGRAMS

PROGRAM	DEL	MD	NC	PA	SC	VA	WVA
State-sponsored industrial development authority	X	X		X	X	X	X
Privately sponsored development credit corp.		X	X	X	X	X	X
Revenue bond financing:							
State authority or agency	X			X	X		X
City and/or county		X	X	X	X	X	X
General obligation bond financing:							
State authority or agency	X						
City and/or county		X					
Loans for building construction:							
State	X			X[1]			X
City and/or county				X[1]			X
Loans for equipment, machinery:							
State	X						X
City and/or county							X
Loan guarantees for building construction:							
State	X	X					
City and/or county							
Loan guarantees for equipment, machinery:							
State	X	X					
City and/or county							
State financing aid for existing plant expansions	X	X		X			X
State matching funds for city/county financing programs		X					X
Incentives for establishing plants in high unemployment areas:							
State		X		X			X
City and/or county				X			X
State financing program for purchase and installation of pollution control facilities	X[2]	X[3]	X[4]	X[5]	X[4]	X[4]	X

[1] State and local program of participation in building construction.

[2] Industrial revenue bonds or state guaranteed bond issues.

[3] Industrial revenue bonds or MIDFA.

[4] Industrial revenue bonds.

[5] Industrial revenue mortgages and bonds may be used.

SOURCE: Industrial Development, Atlanta, Georgia, November/December 1976.

A 1976 revision of the state Revenue Bond and Mortgage Act in Pennsylvania permits use of loans for development of industrial parks, for construction of new transportation facilities, and for conversion to less expensive fuels. Also in that year, the limit on the percentage of the cost of new buildings which the Pennsylvania Industrial Development Authority (PIDA) may finance was raised from 40% to 50%. These changes relate to the operation of the "Pennsylvania Plan" for 100% industrial construction financing which includes 50% by a first mortgage loan obtained by the local development agency from banks, insurance companies, or other lending institutions, a second mortgage loan from PIDA which ranges from 30% to 50% of the project cost depending on unemployment in the area, and participation by the local community in the balance (if any) of the financing. PIDA participates 45% in financing R&D firms. From 1956 through May 1974, $326 million for 1,265 projects whose total cost was $912 million have been borrowed through PIDA.*

Industrial revenue bonds are the only financial aids offered by North Carolina, South Carolina, and Virginia. Bonds in the latter are issued only on the local level, although a state-sponsored industrial development authority is in existence. Until last year, North Carolina had only a private development credit organization. Voters then approved a state constitutional amendment enabling counties to establish authorities to issue industrial revenue bonds for financing new industry, expansion, and/or pollution control facilities. Each bond issue must be approved by the North Carolina Local Government Commission, which evaluates the financial capability of the applying firm, and the Secretary of the Department of Economic and Natural Resources (now Department of Commerce), who must be satisfied that (1) there will be no adverse environmental effect, (2) new

jobs will be created, and (3) wages to be paid will be above the county average.*

Pennsylvania permits the largest number of project types to be included in its industrial revenue bond program: not only industrial buildings, but office buildings, warehouses, recreational attractions, retail merchandise establishments, and medical facilities. As noted, industrial parks were recently added to the list. In West Virginia, office, retail, and medical facilities were not permissible, but industrial parks were. The Maryland program covers industrial buildings, office buildings, warehouses, and medical research facilities. Programs in the remaining states were applicable to fewer types of projects, and in North Carolina, only industrial buildings were covered. All seven states have revenue bond programs for pollution control equipment.

The remarkable aspect of this comparison is the relative absence of financial incentive programs from the states which are otherwise quite active i economic development: South Carolina, North Carolina, and Virginia. It is possible to conclude that policy-makers in these states are not convinced of the efficacy of such programs, or, alternatively, that the product being promoted by these state programs is, by its nature, significantly more marketable than that of the other states, which requires incentives.

G. Tax Incentive Programs.[28] As is apparent in Table 18, West Virginia is the only state of the seven which offers a corporate income tax incentive: any new or expanding business can obtain a 10% tax credit on its business and occupation taxes for 10 years.[29] Excise tax exemptions are also available in West Virginia, and Delaware does not collect excise tax. The City of Wilmington has a ten-year graduated-basis property tax deferral for new industry which moves into the city.* The state of Maryland does not offer any property tax deferral or abatement programs, but some of the local governments do so. South Carolina has no state property tax, but the state assesses all industrial facilities to assure equitable local treatment. Exemption from county taxes other than those for education is given to new manufacturing businesses for five years.* In Virginia, localities may exempt pollution abatement equipment and facilities from real or personal property taxes.

North Carolina and West Virginia are the only two of the seven states which do not offer some sort of exemption or moratorium on equipment and machinery. Delaware, North Carolina, Pennsylvania, and South Carolina have freeport laws which exempt goods in transit from taxation. South Carolina claims to be the only eastern seaboard state which has a no situs law exempting all goods moving in interstate commerce from inventory taxes.* It has no manufacturer's inventory tax. Pennsylvania excludes all tangible personal property from taxation at the local level. West Virginia has succeeded in having a freeport law passed in the legislature as a constitutional amendment; it will be voted on by the public in November 1978. The state

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[28] Also from Industrial Development magazine, November/December 1976.

[29] Interview information, henceforth marked *.

development agency has lobbied hard for this change, which would open the state up to warehousing.*

All seven states have various sales/use tax exemptions on new equipment and exemptions on raw materials used in manufacturing. Maryland allows classification of the equipment of research and development firms as manufacturers' machinery and equipment, which makes it eligible for tax exemptions. Local governments in Virginia may separately classify R&D firms' tangible property and tax it at different rates. Pennsylvania and South Carolina also offer tax incentives to R&D firms. Delaware and Virginia make available accelerated depreciation opportunities for industrial equipment.

The taxing entities in Virginia are the local governments, not the state; thus the tax situation varies from county to county and among the independent cities. North Carolina maintains the pattern of few incentive programs for industry demonstrated in the preceding financial section, but South Carolina offers as many tax incentive programs as any of the other seven states. Virginia's local governments also offer a wide variety of tax programs. It is not possible to conclude from the available information the extent, magnitude, or utilization by industry of these programs. Most of the development agency officials tended to emphasize inventory tax exemptions when asked about important financial aid to industry, and, in West Virginia, of course, the corporate income tax exemption is promoted strongly.

TABLE 18

TAX INCENTIVE PROGRAMS

PROGRAM	DE	MD	NC	PA	SC	VA[1]	WV
Corporate income tax exemption							X
Personal income tax exemption							
Excise tax exemption	X[2]						X
Tax exemption or moratorium on land, capital improvements		X[3]			X	X[4]	
Tax exemption or moratorium on equipment, machinery	X	X		X[5]	X	X[4]	
Inventory tax exemption on goods in transit (freeport)	X		X[6]	X[7]	X		
Tax exemption on manufacturers' inventories	X	X		X[7]	X		
Sales/use tax exemption on new equipment	X	X[8]	X[9]	X[5]	X	X	X
Tax exemption on raw materials used in manufacturing	X	X	X[10]	X[5]	X	X[11]	X
Tax exemption to encourage research and development		X[12]		X	X	X[13]	
Accelerated depreciation of industrial equipment	X					X[14]	

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1 Taxing entities in Virginia are the local governments, thus tax incentive programs vary among jurisdictions.

2 Delaware does not collect excise tax.

3 Exemption may be applicable at county or local level.

4 Localities have option of exempting all or part of certified pollution control facilities and equipment from real or personal property taxes.

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Inventory tax exemption on goods in transit (freeport)	X		X[6]	X[7]	X		
Tax exemption on manufacturers' inventories	X	X		X[7]	X		
Sales/use tax exemption on new equipment	X	X[8]	X[9]	X[5]	X	X	X
Tax exemption on raw materials used in manufacturing	X	X	X[10]	X[5]	X	X[11]	X
Tax exemption to encourage research and development		X[12]		X	X	X[13]	
Accelerated depreciation of industrial equipment	X					X[14]	

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1 Taxing entities in Virginia are the local governments, thus tax incentive programs vary among jurisdictions.

2 Delaware does not collect excise tax.

3 Exemption may be applicable at county or local level.

4 Localities have option of exempting all or part of certified pollution control facilities and equipment from real or personal property taxes.

TABLE 18 (Continued)

5 Exclusion from sales and use tax on industrial purchases used directly in industrial production and research.

6 Applicable to goods stored in bonded warehouses.

7 Exclusion of tangible personal property from taxation at local level.

8 Taxed at 2% instead of usual 4%.

9 New equipment is allowed a preferential rate of 1%, with maximum tax of $80 per article.

10 Leaf tobacco is allowed an exemption of 60% of tax rate; bales of cotton, 50%; and peanuts, 20%.

11 Exempt from sales/use tax, but not from business capital tax.

12 R&D equipment is classified as manufacturers' machinery and equipment, and as such is eligible for tax exemptions.

13 Local governments may classify separately the tangible property of R&D firms from that of other taxpayers and tax it at different rates.

14 Allowable depreciation is similar to that which is permitted under federal laws.

SOURCE: Industrial Development, Atlanta, Georgia, November/December 1976.

H. Special Services for Industrial Development. All seven states provide publicly-supported training of industrial employees, usually on a shared-cost basis with the state Departments of Education and/or Labor. Generally, this training is tailor-made for the company and offered both in community colleges or technical institutes or on the worksite. As expected, the southern states of the group and West Virginia emphasize these programs in their pitch to relocating companies because of their greater populations of unskilled and semi-skilled rural citizens. However, Delaware and Maryland have recently established such programs.

PENNTAP (Pennsylvania Technical Assistance Program) is a unique program administered by The Pennsylvania State University with partial support from the state Department of Commerce. PENNTAP offers cost-free scientific and technical information and consultation on request through 24 "receiving stations" around the state. In addition, the Bureau of Science and Technology (BST) of the Pennsylvania Department of Commerce, consisting of scientific and technical advisers to the governor, works intensively on technical problem areas, i.e., energy, coal gasification, etc. BST personnel have been used by the international development staff in Pennsylvania as participants in seminars and as consultants for clients with potential production problems. Pennsylvania, it will be recalled, ranks third in the U.S. in the number of doctoral scientists and engineers.

Virginia's highway department earmarks $2 million per year, about $150,000 to $200,000 per political subdivision, for access roads for new industry. In North Carolina, the Department of Transportation, with which the development agency has close ties, deals on a case-by-case basis with the provision of access roads by the state.

West Virginia businesses who bid not more than two per cent higher

than out-of-state firms for state contracts are favored in the terms of a new law passed last year. In response, Pennsylvania decided not to accept any bids on state contracts from businesses based in West Virginia.[30]

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30 Industrial Development, November/December 1976, pp. 20, 21.

IV. AGENCY VIEWS OF COMPETITIVE POSITION AND OUTLOOK FOR THE FUTURE

At the time of the interviews, a modification of the Coastal Zone Act was pending in the Delaware legislature. The director commented that, apart from this possible relaxation of coastal controls, the future seemed to hold an unpromising situation. The state has available land and manpower, but other states do also; the River is the greatest single asset, but it is highly protected environmentally, and present laws and taxes are burdensome to business. The only real advantage the state can claim is its geographic location.

Maryland's future is felt by the Secretary to be virtually unpredictable. The state may suffer a serious decline if a proper balance is not struck between environmental and economic interests. On the other hand, with only a little more money and greater flexibility in its use, it is believed that the development agency can capitalize on Maryland's tidewater location, its skilled manpower, and the high quality of life in the attraction of new business.

North Carolina perceives a rosy future, having had heavy activity in the first four months of 1977, particularly from Canada in response to the political situation in Quebec and the imposition of wage and price controls. Its low percentage unionized is perceived as a great attraction for both domestic and international firms.

The banking communities in Pittsburgh and Philadelphia, quality educational opportunities, a variety of urban and rural settings in which to live and work, a Free Trade Zone at Scranton-Wilkes Barre Airport, and climate are listed as strengths by Pennsylvania development agency officials. Environmental activism and high unionization in some areas are drawbacks.

The state's energy resource base combined with its strong technical capacity and the wide variety of development incentive programs available are the basis for cautious optimism in Pennsylvania.

South Carolina points to the natural and historical advantages of its location in the Piedmont textile area, its low unionization, and its right to work law, and the widespread public support for development as justification for an enthusiastic outlook on the future. The deputy director of the Development Board made the argument this way: On the international level, the United States remains the preeminent capitalist nation, and there is an increasing desire on the part of foreign firms to protect themselves against uncertain political and social situations abroad by making investments in the U.S. Within the United States, the "sunbelt" area is growing fastest in population and economic welfare and the southeastern portion of the region can expect to enjoy a large amount of this growth because of the developed infrastructure which does not exist in more western states. Within the southeast, South Carolina is the center of the region, has natural seaports, and has a strong development effort which is well-supported. The interest expressed by recently relocated companies is a strong selling point.

Virginia shares North Carolina's belief in the strong competitive advantage which results from the right to work law. Development officials also cite the favorable perception by the private sector of attitudes toward business in the state and also the tendency of Virginians to identify personally with their state, rather than their towns or neighborhoods, as positive factors. The Virginians foresee a positive future, although they admit that the state's situation is locked into the general trend of the national economy and can improve substantially only as the nation does.

However, they believe on the basis of the 1974-75 recession that Virginia will not suffer as much from downswings because of the substantial foreign investment.

The Interstate and Appalachian highways, an attractive labor supply, low crime rates, low property taxes, and low income taxes are the attributes the West Virginia development agency believes make the state attractive to new industry. After a decade of net outmigration, however, the key word for the future in West Virginia is coal. The state has a 400-year known reserve, and most recent growth has been in coal extraction and coal-related industry, i.e., the manufacture of mining machinery, stripping and earth-moving equipment. This growth is expected to be long-term, as energy problems are long-term. Coal gasification plants represent massive investments: a single project now in planning stages would take five years to build, would be run on a pilot basis for five more years, and then would go into commercial production, representing a $1.3 billion investment when operational. Refineries will also be built for the ammonia, sulfur, and oil byproducts of the process.

Industries from the European coal regions are beginning to express interest in West Virginia sites, and the new federal coal research facility will be located at Morgantown, the result of a powerful state voice in the Senate. All of Union Carbide's research and development facilities are now located in West Virginia.

V. ECONOMIC DEVELOPMENT AGENCIES IN THE STATES: EFFECTIVENESS

Economic growth is not difficult to measure. The first section of this study examined several of its aspects: employment, earnings, income, exploitation of natural resources, urbanization. In addition, the works of government, made possible by additions to the tax base brought about by increased investment, were also depicted: higher education, vocational education, highways, port development. The second half of the study has focused on the particular efforts being made by state governments to attract new business into their states and to encourage expansion of existing industry. It is the impact of these efforts which is most difficult to assess. Variable regional growth rates, degree of agency participation in relocations, accuracy of multipliers in computing secondary impacts, skewing of statistics by movement of one or two very large companies, and basic believability of output measures published by agencies to justify continued public funding are all serious problems.

The impact which the state agencies claim for themselves is presented in Table 19 as a starting point, with the cautions just mentioned.

When agency reports are compared with employment data presented earlier, it is immediately apparent that the agencies in North Carolina, South Carolina, West Virginia, and possibly Virginia are crediting themselves with all relocations and expansions taking place in their states, although North Carolina does note that it was "instrumental" in only 30% of the relocations. The investment figures do not appear to be comparable: for example, $650 million in investment in Virginia annually is the result of 113 new and expanded companies, while a slightly larger amount in North Carolina comes from almost ten times the number of companies. One of the contributors to disparity among investment totals may be the way in which pollution control equipment investment

TABLE 19

STATE DEVELOPMENT AGENCY REPORTS OF EFFECTIVENESS

DELAWARE

FY 1976	54 new prospects
	3 new plants
	533 new jobs from new plants, expansions, and financing programs

MARYLAND

Projects with which the agency was directly involved

1976	10 new plants; 460 new jobs
1975	7 new plants; 1020 new jobs
1974	4 new plants; 634 new jobs
1973	5 new plants; 505 new jobs

NORTH CAROLINA

1976	124 new companies (including 2 foreign)
	8093 new jobs from new companies
	911 expanded companies
	11573 new jobs from expanded companies
	$1,006,493,000 in new investment
1975	$ 700,000,000 in new investment
1974	$ 870,000,000 in new investment
1973	$ 727,000,000 in new investment

The agency was instrumental in an estimated 30% of all new plants; was involved in almost all relocations.

PENNSYLVANIA

BED	None for publication
BIC	Export promotion - 1,700 direct jobs annually
	1,700 indirect jobs annually
	Reverse investment - 500 direct jobs 1975
	500 indirect jobs 1975
	Total jobs created or preserved annually - 4,000 - 5,000

SOUTH CAROLINA

FY 1976	127 new and expanded plants
	7309 new jobs
	$510,004,000 new investment (24% foreign)
FY 1975	181 new and expanded plants
	7953 new jobs
	$352,732,000 new investment (15% foreign)
FY 1974	148 new and expanded plants
	14094 new jobs
	$1,166,935,000 new investment (26% foreign)

VIRGINIA

1976	52	new companies
	5130	new jobs
	61	expanded companies
	5540	new jobs

Over the last five years there has been an average yearly investment in manufacturing of $650,000,000. Since 1969, foreign investment has totaled $400 million.

WEST VIRGINIA

1976	30	new plants;	933 employees;	$26,975,000 investment
	38	expansions;	1519 employees;	$258,701,000 investment
1975	13	new plants;	1893 employees;	$45,875,000 investment
	23	expansions;	379 employees;	$137,809,500 investment
1974	27	new plants;	2633 employees;	$126,310 investment
	40	expansions;	1529 employees;	$179,675,600 investment
1973	31	new plants;	3375 employees;	$60,771,750 investment
	37	expansions;	2109 employees;	$126,067,000 investment

SOURCE: Interviews

is counted.

The data in Table 19 are rather more useful as a raw measure of economic growth in the seven states. North Carolina clearly is enjoying the most new activity, both from out-of-state relocations and expansion of existing firms. Virginia and South Carolina seem to be experiencing about the same number of new firms moving into their states. West Virginia's totals were about one-third of those of Virginia and South Carolina; Maryland's were about one-third of West Virginia's, although Maryland's may be understated.

A different way of looking at the economic growth of the states and the contributions the agencies make is presented in Table 20. Using employment (see Table 8) as a measure, the following question was asked: What would the state's employment have been if it grew at the same rate as the region of which it is a part? The difference between the employment obtained in this manner and the actual employment demonstrates the extent to which the state is either realizing growth due to its own competitive advantages (which include the efforts of its development agency) or, alternatively, is lagging behind the region due to competitive disadvantages. Thus, a positive number in Table 20 signifies that state employment has grown by that many thousands of jobs over and above the growth of the region. A negative figure denotes the converse. Zero indicates growth at exactly the regional rate.[19] The relevant regions used for this analysis were: Middle Atlantic, consisting of New York, New Jersey, Pennsylvania, Maryland, and Delaware; and South Atlantic, made up of West Virginia, Virginia, North Carolina, South Carolina, and Georgia. Each of the seven states in the study is compared to the

[19]The following two computations were performed: $E^S_{i_{70}} - \left(\frac{E^R_{i_{70}}}{E^R_{i_{60}}}\right) E^S_{i_{60}}$ and

region of which it is a part. Table 20A presents the Middle Atlantic study states, and 20B the South Atlantic.

Delaware enjoys a competitive advantage of significance in the Middle Atlantic region in construction and chemicals. The advantage in the chemical industry has decreased since 1970, but the state at least did not participate to any substantial extent in the absolute regional decline in industry employment. Services, and finance, insurance, and real estate are growing slightly faster in Delaware than in the region.

The most important, and most alarming, observation to be made about the Maryland analysis is the closeness of almost all the positive figures to zero and the large number of negative figures. This means that Maryland is sharing, and in many cases exceeding, the decline of the Middle Atlantic region, in which there was no growth in employment in any manufacturing sector between 1970 and 1975. The apparent competitive advantages Maryland demonstrates in the paper, printing, electrical, and transportation equipment industries is actually the result of a smaller drop in employment in the state than in the region in these industries. Particularly serious for the state's economy are the 4,500 Maryland primary metals jobs lost in excess of the 17% reduction experienced in the region as a whole. Maryland has also lost much of the competitive advantage it enjoyed in the 1960's in printing and publishing. Construction was the only industry which was growing in Maryland while declining in the region. Trade, services, and government grew faster in Maryland than they did in the region.

$E^S_{i_{75}} - (\frac{E^R_{i_{75}}}{E^R_{i_{60}}})E^S_{i_{60}}$, where $E^S_{i_{70}}$ equals industry employment in the state in 1970 and $E^R_{i_{70}}$ equals industry employment in the region in 1970.

TABLE 20A

MIDDLE ATLANTIC-STATE SHARES OF REGIONAL GROWTH (Employment in thousands)

INDUSTRY	DELAWARE		MARYLAND		PENNSYLVANIA	
	1960-70	1970-75	1960-70	1970-75	1960-70	1970-75
Mining			0.5	-0.4	-2.4	2.5
Construction	-0.9	3.3	3.1	15.9	-23.4	19.4
Food and food prod.	2.5	1.0	3.8	-0.2	6.8	7.2
Tobacco					-0.2	-0.5
Textile mill prod.	-0.6	-0.1	-0.2	-0.4	-9.5	-1.4
Apparel and other prod.	-0.3	0.8	2.2	0.3	23.3	6.4
Lumber and wood			-0.8	0.4	1.3	0.9
Furniture and fixtures			-0.1	-0.4	3.4	0.4
Paper and allied prod.			1.1	1.1	5.0	0.2
Printing and publishing	0.1	0.2	5.1	1.5	-3.6	6.3
Chemicals	4.2	2.1	-2.0	-2.4	-5.7	-1.1
Petroleum and coal			-0.1	0.4	0.6	-1.6
Rubber and plastics	-0.4	-0.2	-1.9	0.1	5.2	4.9
Leather prod.	0.3	-0.2	0.5	-0.1	1.9	0.8
Stone, clay, and glass			0.8	0.0	4.1	2.8
Primary metals	0.1	0.3	1.4	-4.5	7.6	12.0
Fab. metal prod.	-0.3	0.4	--	0.8	-4.4	4.3
Machinery, exc. elec.			1.9	-0.5	1.7	11.5
Elec. mach. and supplies			1.8	2.9	10.8	0.8
Transportation equipment			0.5	1.2	24.7	6.5
Instruments						
Miscellaneous manufacturing						
Transportation and utilities	-0.3	1.1	5.2	4.2	-25.0	10.7
Wholesale and retail trade	8.4	0.0	67.5	39.1	-32.8	29.9
FIRE	1.3	2.0	12.3	8.8	-4.2	11.8
Services	2.4	3.2	56.8	22.7	-38.9	39.8
Government	4.6	1.5	36.2	20.5	-31.2	-8.5
Total non-agricultural	27.0	15.6	216.1	136.6	-145.3	112.1

SOURCE: Analysis of data presented in Table 8 (employment data for additional states in the region are from Employment and Earnings also).

TABLE 20B

SOUTH ATLANTIC-STATE SHARES OF REGIONAL GROWTH (Employment in thousands)

INDUSTRY	N. CAROLINA		S. CAROLINA		VIRGINIA		W. VIRGINIA	
	1960-70	1970-75	1960-70	1970-75	1960-70	1970-75	1960-70	1970-75
Mining	0.8	-0.8	0.2	-0.2	-0.3	1.8	-2.4	1.1
Construction	2.0	9.3	1.2	4.2	-1.9	-0.6	1.9	-5.5
Food and food prod.	2.9	-0.6	1.3	-1.0	-2.4	2.9	-3.4	-1.1
Tobacco	-2.0	0.0			1.9	-0.2		
Textile mill prod.	13.3	0.8	-10.1	-2.8	0.1	3.3		
Apparel and other prod.	16.5	4.8	-6.2	-0.8	-0.8	-2.4	-1.0	-0.4
Lumber and wood	1.3	2.9	-0.9	0.6	1.6	-2.4	0.0	0.0
Furniture and fixtures	2.0	5.1	-0.1	-0.9	-0.2	-1.3	0.0	-0.3
Paper and allied prod.	-0.5	1.0	1.2	0.9	-1.0	-1.5		
Printing and publishing	0.8	-0.4	-0.2	-1.0	-0.5	0.9	-0.9	-0.4
Chemicals	8.2	8.4	8.0	2.8	-3.7	-8.5	-11.4	-4.2
Petroleum and coal								
Rubber and plastics								
Leather prod.					-0.6	0.3		
Stone, clay, and glass	2.5	0.4	2.7	0.0	0.9	0.9	-7.2	-1.7
Primary metals	2.5	-0.2			1.4	-0.4	-6.2	-2.7
Fabricated metal prod.	0.4	1.3	--	1.1	-3.3	2.5	-5.4	-0.8
Machinery exc. elec.	3.8	-1.1	4.3	2.7	-0.4	-0.4	--	-0.2
Elec. mach. and supplies	-10.9	-4.9	--	1.5	5.9	3.7	--	-1.2
Transportation equipment	1.7	4.7			-6.8	8.2		0.1
Instruments								
Miscellaneous manufacturing								
Transportation & utilities	8.9	2.2	4.6	0.5	-10.1	-0.5	-15.8	-4.8
Wholesale & retail trade	14.6	-9.5	-3.6	8.2	-2.9	2.1	-27.3	0.9
FIRE	4.7	-1.2	-3.1	2.0	1.0	1.3	-4.8	-1.7
Services	3.9	-12.1	-1.8	6.1	15.9	5.3	-17.5	-7.1
Government	-6.7	-2.7	-8.7	20.2	39.8	-3.9	-15.5	-7.3
Total non-agricultural	61.2	-18.2	3.2	26.3	54.3	37.9	-145.7	-22.8

SOURCE: Analysis of data presented in Table 8 (employment data for additional state in the region are from Employment and Earnings also).

Pennsylvania shares Maryland's plight in that its apparent advantages over the region are the result of lesser losses in employment within the state than outside it. Although suffering declines in primary metals employment, however, it has managed to stay well ahead of the region. It is interesting to note that employment in Pennsylvania has been growing in non-electrical machinery in the face of regional loss of employment in this industry, partially aided by the investments of foreign firms in the state.

Looking at the South Atlantic states together first, the striking fact is the small size of the numbers, both positive and negative, for South Carolina, indicating that much of its employment growth can perhaps be attributed to the ascendancy of the region rather than to competitive advantages enjoyed by the state. It should be noted, however, that, particularly in the area of community preparation, were the state not as active as it has been to date, it might not have been able to participate in this regional growth to the large extent which it has. South Carolina employment in chemicals and non-electrical machinery grew slightly faster between 1970 and 1975 than that of the region, but in both industries, the state's competitive advantage was less than it had been between 1960 and 1970.

West Virginia's employment in most industries grew slightly less than the total region. It lagged significantly behind the region in only the construction, chemicals, and primary metals industries between 1970 and 1975, however, and the amounts of the disadvantages in the latter two cases were substantially improved over the previous time period.

Virginia's employment exhibited more variance from the regional trends than did South Carolina's, but often in a negative direction. It led the region in textile mill products, which was declining in the state; and its employment losses in the chemicals industry put it well behind the region.

Its 1970-1975 advantage in electrical machinery and supplies represents a lowering in competitive position over the previous period. Most serious for the state's economy, though not necessarily for its competitive position, is the slowing growth of government. Virginia did, however, experience considerable growth in transportation equipment manufacture, one of the few industries which has lost employment regionally. It also had greater growth in fabricated metal products employment between 1970 and 1975 than did the region, in which employment grew 15%.

North Carolina presents the greatest departure from the regional trends, first because of its heavy concentration of employment in natural resource and agriculture-oriented manufacture: apparel, lumber and wood, and furniture and fixtures. But North Carolina also substantially exceeded regional employment growth in chemicals and transportation equipment, and its employment in other industries tended to exceed the regional average slightly rather than lag. Only in electrical machinery and supplies did the state fall well behind the region in the 1970-1975 time period, but even this position represented an improvement over the 1960's. Growth in the 1970's in non-manufacturing employment, however, has grown a great deal slower in North Carolina than in the region, and has slowed from region-pacing rates in the 1960's. If this slowed growth in business support services continues, it may adversely affect the state's ability to attract industry. Overall, however, North Carolina and Virginia appear to have enjoyed the greatest competitive advantage in the region.

This analysis has suggested that states prosper or decline as their regions do, and furthermore, that the extent to which a state does or does not participate in regional economic trends may be a more

accurate indicator of development agency impact than the number of new comapnies which move to the state. Other factors contribute to the competitive position in which each state finds itself, however, and it is only as the state agencies do more targeting of industry sectors and this information is compared with the regional shares analysis over time that meaningful conclusions can be drawn about agency effectiveness.

These findings do suggest, however, that one turn back in the study to take a closer look at the situations, structures, and programs in North Carolina, Virginia, and Pennsylvania to seek clues for effective economic development: a widespread, cooperative network of long-standing made up of local people interested in the development of their communities; a team of well-paid, experienced industrial development representatives; a well-equipped "tool box" of economic development programs and a vigorous international effort. Do these strategies work when imported, as South Carolina is trying to do in fostering local development initiative? Do they fit the situation and needs in Maryland, for example? If the warning signs about the Maryland economy described in this and other recent studies are to be believed, and each new research effort confirms their seriousness, the leaders of the state should be engaged in an intensive examination of the lessons other states offer.

Perhaps the first lesson is this: there must be widespread understanding of the economic situation both by the general public and throughout the government. Once this has been accomplished, priorities must be balanced among economic, environmental, and local control concerns, and strategies developed and agreed upon. This is clearly a job for which strong, responsible leadership in the public sector is required, and

has not been apparent in Maryland. Certainly private sector leadership and cooperation are also desirable, and have also been lacking on the state level, but they are no substitute for the understanding, priority, and personal involvement of the government and the leaders of the legislature. This attention must be gained before consideration of new programs or procedures is undertaken, for they cannot succeed without it.

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